



L.C. Raymond.

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MACDONALD COLLEGE LIBRARY

GIFT FROM Prof. L. C. Raymond ON April 21/66.
(Date)





Editorial Board.

The Arizona Desert.

By S. B. Sinclair, late Head of the School for Teachers.



Went spent six days and nights in the Arizona Desert. The first ocean voyage is, to most land people, a thrilling and overpowering experience but a desert voyage is even more so. One sees desert, feels desert, eats desert and sleeps desert, until one feels like a composite of sand, sage bush, mirage, petrified forest, grand canyon, gold mine, Spanish relic, Pueblo Indian and cowboy all rolled into one.

They usually travel in pairs, live out of doors and do their own cooking. Their employers wish them to remain on the ranch and so, when pay-day comes, advise them to go to the city, get drunk, spend their money as quickly as possible and return to work when the money gives out—advice which the cowboy promptly follows.

A cowboy has little fear of an encounter with a bull. The bull, when charging, shuts his eyes and springs. The cowboy,



A Desert Post Office.

To look over the far-stretching prairie of drifting sand, dotted here and there with a clump of greyish grass and an occasional group of scrub trees, one would scarcely think it possible that any animal life could be found there, and yet on this very desert (so-called) are reared some of the best beef cattle of the United States.

The cowboy's life is full of freedom with sufficient thrills to make it interest-

ing. at the psychological moment, when the bull is entirely off the ground, grasps the far horn with one hand, passes the other hand over the head and seizes the nose, and before the brute realizes what has happened has him "hors de combat." A close encounter with a cow is a different proposition for she does not shut her eyes for the final spring, and the cowboy has learned, in such cases of emergency, to trust to the

fleetness of his horse or to climb the nearest tree.

The railways are not fenced and many cattle are killed by trains. The authorities say it is useless to fence against prairie cattle, for in dry weather when they start for water nothing can stop their progress. The cowboys say cattle can scent water for twenty miles and are never deceived by the mirage which is so natural that the oldest settler often thinks he sees water a mile away only to find himself mistaken as it steadily recedes on his approach.

Our cowboy guide told us an interesting story of a wild man (of whom there are quite a number in the desert) who was waiting for them in their tent when they came home, one evening. These men are usually fugitives from justice who live a solitary rambling life. They carry no firearms and kill their quarry with stones which they hurl with great skill. The cowboys' uninvited guest, when asked how he got anything to eat, drew a dead rabbit from under his cloak with the significant remark: "I had to throw twice at this fellow."

On the way to the Grand Canyon we were shown a post office, of which the above picture is a snap-shot. The brakeman of the mail train drops the mail into the box (which has neither lock nor key) in one heterogeneous pile and takes out any letters which have been left for mailing. The cowboys come for many miles for their mail and select their letters from hundreds of others, each man being his own postmaster. I asked what would happen if some one intentionally took a letter belonging to some one else. The response came quickly: "We wouldn't make any mistake in finding out just who did it, and he would be found lying

on his back on top of the ground some morning and no questions would be asked."

In this primitive form of self-government, obviously no great effort is made "to make the punishment fit the crime."

At a waystation near a gold mine, which is said to produce \$150,000.00 of gold per month, three boys from the school boarded the train on the way to their home, eighteen miles distant. They proved to be highly entertaining companions. They showed us samples of their school work in arithmetic, composition, writing and drawing and were making fair progress, but it was evident that the school had not gripped them with any permanent power and that their vital interests were outside the school.

Their eyes brightened and the car rang with laughter as they told us of their experiences with the wild things of the desert, especially with the wild burros which their fathers had caught and vainly tried to break to saddle and harness. They knew the birds and other desert animals as close acquaintances and were keen to know about the birds of Canada. The most interesting of all problems, however, was this, did the gold prospector really know and did he tell the truth when he said: "if the thing looks like gold and you spit on it and it doesn't change color the least bit it is gold certain sure."

Thus, with these children of the desert, as with all others, we find that to interest them in the school we must begin with the solution of the problems growing out of their own life experiences—a task which can be performed only by those teachers who have lived the life long enough to know something of its mysteries and charms.

Food Products at the Panama-Pacific International Exposition.



WHEN a country so far away from San Francisco as Argentine appropriates \$1,300,000 in gold to expend on an exhibit of her products at the great exposition by the Golden Gate, there must be some substantial reasons for such action. And there are. Among the reasons are these: The Panama-Pacific International Exposition which will open its gates February 20, 1915, will be the most complete, the largest, most beautiful, most varied and costly of any world concourse ever held. It is an exposition of contemporary things, of great practical importance to every visitor. The exhibits will illustrate processes and methods. They will be a series of schools, factories, laboratories, with people and machinery at work rather than heaps of materials and specimens.

The exposition palaces will all be ready months before the opening day—several of them already being finished—and in one the exhibits now are being installed. More states, territories and foreign countries already have agreed to participate than ever before took part in a world exposition—35 foreign governments and 38 states already being officially represented, besides many which have yet to take action. The keynote of this, the first world exposition ever to be held at a seaport, is human welfare; service—industrial, educational, scientific, artistic and economic service. Expressing this keynote will be vast congresses and conventions, national and international in character, dealing with every phase of the living thought and action of to-day. And these congresses

are backed by laboratory exhibits, 60,000 of them in eleven great palaces—making this a veritable universal university for every one, old or young, no matter in what field his interests lie.

Of the 226 great world conventions which already have voted to meet in San Francisco during the exposition period, a great many will interest people who have to do with the various foodstuffs of the world. Among these are: The International Congress of Marketing and Farm Credits; the American Society of Animal Production; the American Breeders' Association, dealing with plants and animals; the Society of Horticultural Science; the National Top Notch Farmers' Club, with 9,000 corn-raising boy delegates, from 33 states, each with a record of over 100 bushels of our most important cereal to the acre; the International Congress of Thrift; the National Canners' Association with 2,000 delegates who will come through the canal on a chartered steamer; the National Potato Association and International Potato Congress, with a potato-growing contest; the American Home Economic Association; the Association of Agricultural Colleges and Experiment Stations; and numerous conventions on live stock and horticulture.

The live stock exhibit will be held throughout the ten months of the exposition, a quarter of a million dollars being offered in prizes. With it will be a great dairy and milk exhibit, with model dairy barns and a creamery in operation, turning out pure cheese and butter, which will then go on exhibition in the five-acre Palace of Food Products. In connection with the international

poultry show will be an egg-laying contest. In the sheep department will be held an international sheep shearing contest, machine shearing methods being pitted against hand work.

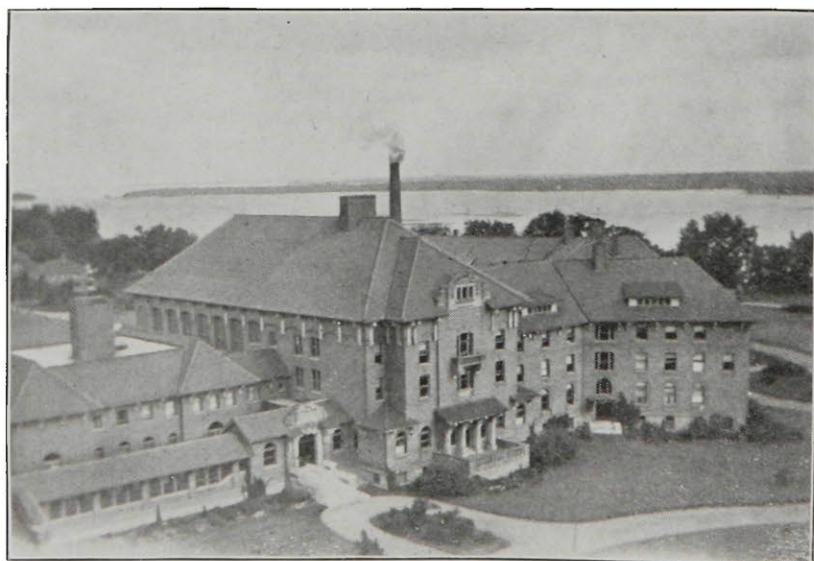
Over sixty acres will be devoted to the live stock show alone. In addition to displays made by breeders throughout the United States, such stock growing countries as Canada, New Zealand, Brazil, Argentina, and South Africa will make vast displays of cattle, sheep, poultry and other animals—Argentina alone promising an exhibit of food stuffs which her commissioners declare will amaze the world and outclass even the United States.

In addition to the exhibits shown in the live stock department, three great buildings—the Palaces of Agriculture, Food Products and Horticulture—each covering five acres, will contain up-to-date exhibits of the world's food products. In the crystal palace of horticulture will be the displays of fruits and fruit products—pomaceous and stone fruits, citrous and tropical fruits, fresh, dried, canned, pickled and processed. A cannery in operation will be one of the features, showing all the processes from can making to preserving, sealing and packing. The greatest exhibit of nuts

and nut products of all kinds, as foods, also will be shown here.

In the two palaces of Agriculture and Food Products, the nations of the world and the various states—about 80 states and countries in all—will compete with exhibits of such necessities as refrigerated meats, poultry, game and fish, milk, butter, cheese, eggs, oils, cereals of every sort, legumes, vegetables, tubers, sugar, beverages, forage, rice, flour products of every description, wines, beverages and confections. There will be bakeries and pastry kitchens at work, confectioneries' factories in operation, and, in like manner, various processes illustrated by means of working plants throughout the long list of food-stuffs.

In a fourth exhibit building, the Palace of Education and Social Economy, there will be about an acre of exhibits from various cities, states and foreign countries and from large corporations and philanthropic associations, devoted to hygiene, nutrition, the preparation and preservation of pure foods, health laboratories and the like, most of them accompanied by elaborate working models made of wax by a corps of expert European artisans and scientists especially employed by the exposition.



View from Macdonald's Tower.

If War Broke Out!

By Maurice C. Signoret, Agr. '17, Reserve Cadet in the French Army.



LET us understand: If the war between France and Germany broke suddenly out, what would be its immediate result? Should we be the spectators at one of those big, modern, horrible and bloody wars, but in which only two nations would struggle? Would England and Russia join France to fight Austria and Italy with Germany assembled? Should we witness a general conflagration between the two groupings of the European powers, a conflagration which would suspend at once the whole world market, the traffic, the trade, and life itself? This is the question which is ever present and which will be only answered in the near day when this fatal and necessary war must break out!

Germany, which is, after Russia, the largest empire of Europe, is an extremely populous land. Its population, actually of 65 million inhabitants in a territory half as large as the province of Quebec, is growing at the rate of over one million inhabitants a year. Not being in possession, like England, or France itself, of colonies vast enough for the establishment of their children, Germans dream of conquests for enlarging their fatherland, and, for the moment, they pass their limits and establish themselves in the neighbourhood, which in this instance is the French country, just as the Japanese who, not having room enough in their proper land, settle themselves in California.

This is why the Frenchmen rebel, for they do not need a constantly increasing German encroachment of population.

Besides, they cannot forget the defeat they endured from the Germans in 1870, a defeat which cost them the loss of two of the finest French provinces—Alsace and Lorraine. Therefore is the idea of revenge deeply anchored in the French mind.

From the English point of view, it is wished that war would break out as soon as possible, for the German navy is increasing in such proportions that, in a few years, it will take away from England the naval supremacy, which is, until the present time, the latter country's privilege and strength. The German navy was, 20 years ago, confined to the fourth place, after England, France and Russia. It has now risen to the second place, right behind England! And when the war will break out, while France's navy struggles with Italy's and Austria's united fleets in the Mediterranean, England's and Germany's navies will attempt to destroy one another in the North Sea.

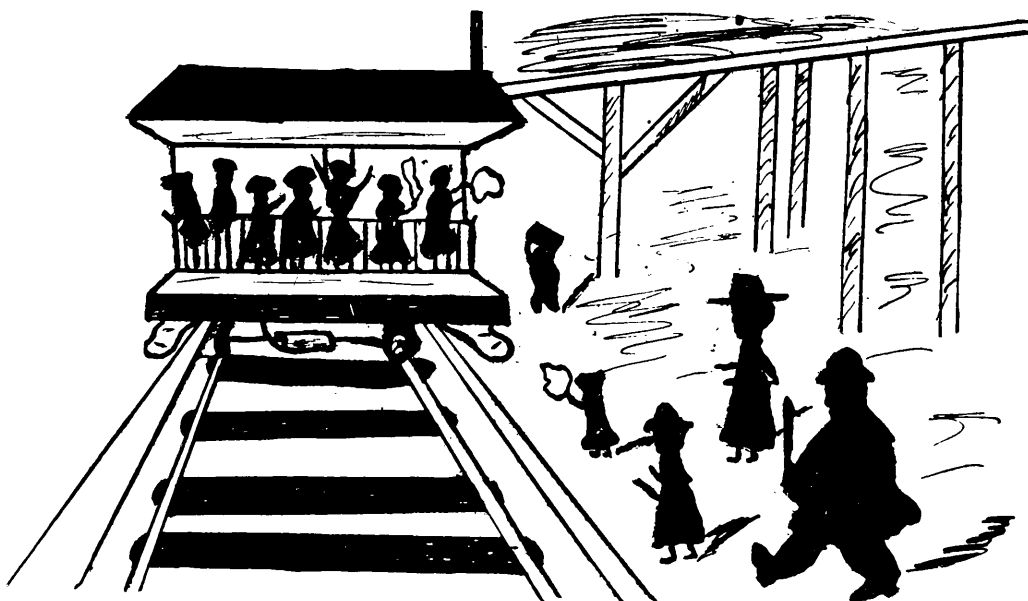
In France and Germany is military service an obligation for all without exception. And during three entire years, on each side of the frontier, these young men receive a minutely military instruction; they are trained and hardened to fatigue, accustomed to the handling of fire-arms, educated in the spite of the neighbour; in one word they are ready for the future collision, where people will see four millions of Frenchmen united with eight millions of Russians and three hundred thousand Englishmen, placed opposite to six millions of Germans assembled with five millions of Italians and Austrians.

The actual grand-master, who holds in his hands the world's peace, is Emperor William the Second. For more than the 25 years that he has sat on Germany's throne he has given evident proofs of his desire for peace; but there is this to fear, that, one day, exasperated by the German military party, and unhappily led by the Crown Prince, his son, he will find himself obliged to let the fire start up out of the continually rising heap of these inflammable substances! And the nations will run the one against the other!

What will occur in this dreadful

contact, in which more than 23 millions of men will take part! What will be the hideous butchery, outrage to humanity, the horrible slaughter, to which this fantastic mixtion will give way, seconded as they will be by frightful engines of artillery, engines of ruin which will make hecatombs of corpses! A terrifying, unimaginable, and, though fatal, unavoidable war, where nations will be dashed by the shock, and in which the revolution, everywhere prepared, will sweep away emperors, kings, their servitors, and the society responsible for such catastrophes!

EDITOR'S NOTE.—*This article was written last spring by Mr. Signoret for our Magazine. Little did we think when he wrote it how terribly true were his words. In fact we did not publish it partly because we did not think it best to even hint at such a dire event. He is a Frenchman, and this article has been left for the most part in the original language in which he wrote it. To-day he is nobly fighting for our liberty at the front. May Heaven bring him back to us safe and sound!*



Training Teachers' Train taking them to their Troubles.

Symbiotic Relations.



WHEN the average person first hears symbiotic relations mentioned, he naturally thinks of medical men and undertakers, lawyers and attorneys, for which we must thank our popular comic papers. Symbiosis, however, really means the living together of

Cecropia plant is a true example of symbiosis. The presence of *Preudomonas radicola* in the root nodules of certain legumes; of *B. coli* in the human intestine; the intimate association of certain Ascomycetes (more rarely Basidiomycetes) with filamentous algae (*Schizophyceae* and *Chlorophyceae*) to

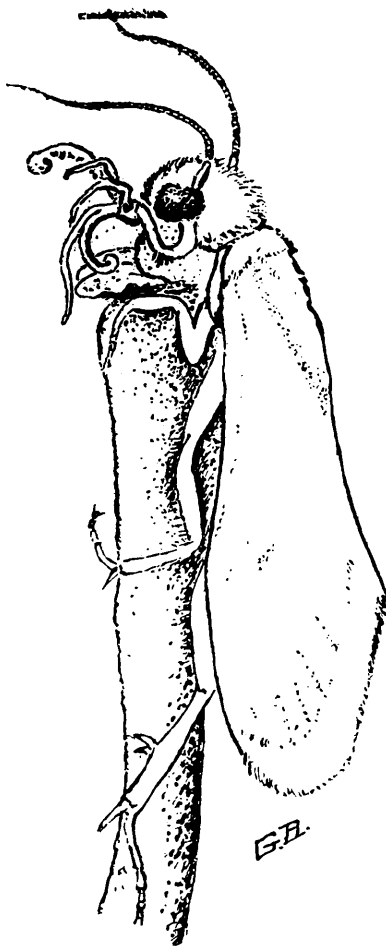


FIG 1.

FIG. 1—*Pronuba yneasella*, female, gathering pollen from anthers of *Yucca*. Enlarged.

two organisms for mutual benefit—in some cases, as we shall see later, it actually means the interdependence of two organisms—and for true examples of this we must turn to nature.

As was pointed out in a former number of this magazine, the association of the ant (*Azteca* spp.) with the

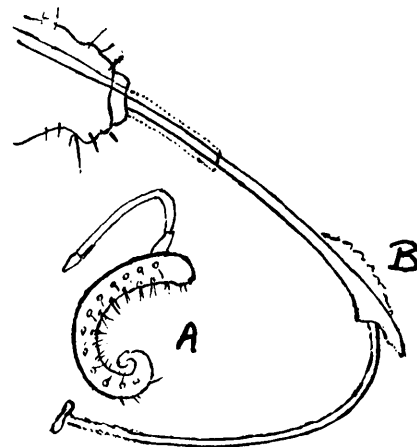


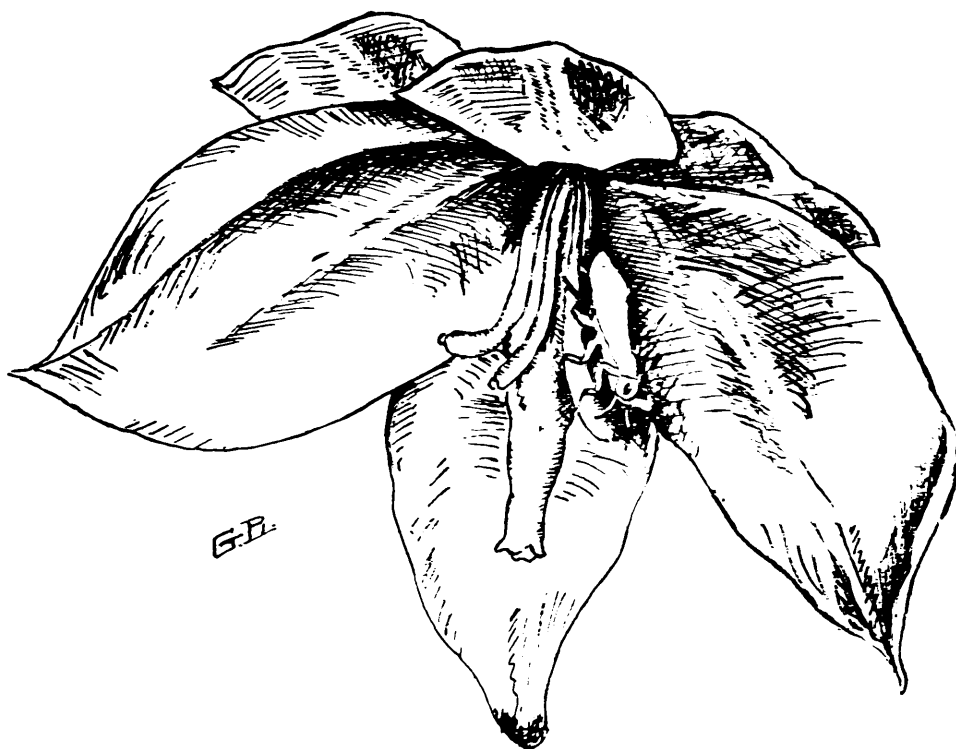
FIG 2.

FIG. 2—*Pronuba yneasella*.. A, maxillary tentacle and palpus; B, protentible ovipositor (this combines in itself functions of a lance and a saw).
—After Riley.

form the consortium of Lichens; of lactic bacteria and *Oidium lactis* in milk—for a time, at any rate : all of these will readily occur to most of us as examples of symbiosis. Our endeavour in this issue, however, is the study of a few examples which are not so common to us in Canada.

Monotropa, for example, is a plant found forming "birds' nests" (?) in many woods. If one carefully removes the organic matter and soil which collect around the roots of this interesting plant, however, hyphal threads of a fungus will be found in intimate association with the roots of the plant. Clearly, the fungus is here supplementing the root hairs of ordinary plants, and in return is being nourished by Monotropa, each one being equally important to the other. This functioning of a fungus as

moved, the crab will most carefully replace it on its back with its claws. The crab ordinarily has a slow movement and resembles a jagged marine stone. With the anemone on its back, however, the deception is almost complete, and it requires more than a little skill to detect its presence on the reefs. The anemone, therefore, aids the crab in protective resemblance. On the other hand, as the anemone feeds on minute animalculae in the water, the constant change of location through being on the



Pronuba moth ovipositing in ovary of Yucca flower, before depositing pellet of pollen on stigma of flowers. About natural size.
—After Riley.

root hair is found on many other plants ; some of them being large forest trees. Monotropa, however, affords one of the best types of Mycorrhiza, as this symbiotic relationship is technically termed.

In tropic waters there is a small species of crab which is always found with a beautiful, filamentous sea-anemone (locally called a sea-flower) growing on its back. That the crab is well aware of the sea-anemone's presence is proved by the fact that if the anemone is re-

crab's back provides it with a bountiful supply of food. It is also protected, in turn, from small fishes and crustaceans by the crab. This is evidently a living together for mutual benefit.

Everyone has heard of the dreaded shark, yet few of us know that a small fish—known as the "pilot"—accompanies this monster and even takes liberties with him with impunity. The shark is one of our oldest fishes and correspondingly dull-witted, so he has

found it advantageous to use the keener intelligence of this small fish, which directs him to his food (the shark being primarily a scavenger). In return for this, the pilot's food supply is ensured, because of his stronger ally, and he also feeds on the lice which abound on the skin of the shark. Although I have never observed it myself, I believe it to be authentic that the pilot is often carried by the shark by affixing itself to the shark by means of a sucker on its own head. The symbiosis in this case, however, is not nearly so complete as the others cited, because every shark is not accompanied by its pilot.

So far, we have not studied an example of the actual interdependence of two organisms. The Yucca lily, however, will afford us the best illustration of this relationship. The flowers of this plant, which are large, white, and strongly scented, especially at night, can only be pollinated by one particular species of moth—pronuba. Conversely, the Yucca is the only plant on which the larvae of this moth can feed. Special evolution, in the strictest sense, has taken place in this case and, as might be expected, both insect and flower are specially modified. The female moth has a long ovipositor with which she can penetrate the tissues of the ovary and possesses peculiar maxillary tentacles which are prehensile and spinous and confined only to this genus. Soon after dark, she begins collecting a load of pollen which she shapes into a pellet with her maxillary palpi and pushes towards the tentacles. When the pellet is about three times the size of her head, she flies to another flower and, after laying a few eggs in the ovary, she assiduously climbs the style and presses the pellet of pollen firmly down the funnel-shaped stigma. The

result is that the ovules are fertilised, but they are so numerous that there are plenty for the larvae to feed upon and also reproduce the plant. It will be noted that the Yucca could no more dispense with Pronuba, than could the moth dispense with the Yucca and so this is interdependence in the strictest sense.

There is a fish in the West Indies, familiar to all fishermen, known as the Horse-eye Cravally, and I have observed that whenever these fish are hooked, a "Sea-Cockroach (which is a small crustacean that burrows in those parts of sandy beaches which are washed by the waves and are common around our coasts) is invariably to be found, under the tongue of the fish, quite alive. As these little crustaceans are not always found in the mouth of fish which have been caught in a net, it may be inferred that they play an important part in enabling this fish to feed. This is very probably an example of symbiosis, but I have never been able to learn of an explanation of the relationship between these two organisms.

That organisms which cannot reason, and are, in fact, among the lowest forms of life, should attempt the solution of problems in economy, naturally claim the attention of all students of nature. A clear and feasible explanation of their symbiotic relations, however, is not always apparent and often entails a close and careful study of the habits and life history of the organisms. It is this striving to follow the infinite and inexplicable, in most cases, changes in nature that fascinate and appeal to the finite brain of man.

J. H. McCORMICK,

Biology, '15.

The Sherbrooke Fair, 1914.



NCE again we met at Canada's Great Eastern Exhibition. The Torontonians and other Ontario people speak about the Toronto fair as "Canada's Greatest Exhibition," and they have, of course, a perfect right to do so from their point of view. We, in Quebec, are more modest when we limit our distinction of the Sherbrooke exhibitions with the prefix "Eastern." But we must needs

event, and interesting tales might be told about the men who have from time to time taken part in it, about the worries of the directors, the intrigues of the exhibitors, the untired and often unappreciated work of the judges, about the funny remarks, the well meant advices, and the ill timed criticisms of the visitors, and finally about the generally successful attempts of the side show managers to separate the public from its money.



The Fakir's Stand.

yield to the bombastic phraseology of our continent by enhancing the limitation with a "great." Still it must be admitted that there is a big difference, as far as modesty is concerned, between positive and superlative, between great and greatest. However, the Editor thinks the name is all right, so why quibble over mere details. The child must have a name.

Canada's Greatest Eastern is not a child either, being launched as far back as 1884. Much could be said about the early history of this Townships Eastern

For such a purpose it would, however, be necessary to pray with Virgil: "Musa mihi causas memora." Bearing in mind his other song, "Ille ego qui quondam—des nunc arma virumque cano," we will proceed instead to tell you about our man, hoc est the Editor of this Magazine. And we will try to give you a comprehensive and, as far as possible, a true account of his impressions and experiences during his four days stay at the Sherbrooke Fair, 1914.

Success in any earthly undertaking depends, in a large measure, upon the

spirit in which one approaches it. In order to fully understand how our Editor Princeps was going to derive such benefit from his Sherbrooke visit, as he claimed he would, we first of all interviewed him in regard to his exhibition philosophy.

"Well," he said, "many people attend a large exhibition to, as they put it, have a good time. They seem to forget that within close proximity to the faker's stand one can find some of Canada's best live stock, and that good information about cereals, vegetables, horses, cattle, sheep, swine, poultry and other things can be had for a song. Why, you only need to put a question to an exhibitor, or to a judge after he has finished his work, and you will generally get to know a good deal more than you asked for. They are all interested, one way or another, and even if a conversation does not in every case bring out a point of information it always affords an opportunity to study human nature. Mind you, I don't pretend to be a saint. I like a bit of fun down the midway all right, and I simply love to study the fakers' skin games. But unless you carry back with you something more valuable and lasting than a poodle dog or a doll, you might just as well stay at home and save your hard earned money."

It would have been interesting to hear him further expound his philosophy, but as the Editor was anxious to see some of "Canada's best live stock," we proceeded together to the show-rings and the barns. As we had to busy ourselves elsewhere, we did not have very much time to spend in each part of the exhibition.

Our visits to the different sections would undoubtedly have been more profitable if catalogues had been available. The lack of catalogues or guide

books, if you prefer that title, is keenly felt by every man who really wants to study the exhibitions. They would give the visitor a better conception of things to be looked for, and would contribute, in a great degree, to a more thorough knowledge of the different features. Whenever we wanted to know the name of an owner or something about the pedigree and performance of an animal, we had to ask for it, and very often it so happened that there was nobody to ask. I have often wondered why catalogues can not be provided at Canadian Fairs. The reason mostly given is that many entries arrive so late that it would be impossible to print the list in time. But why accept late entries at all? It is decidedly bad practice, as it encourages prize-rakers to enter in classes where there is little or no competition. However, "what is past cure is past," said the Editor, quoting Shakespeare—and he was one of the wisest of men.

It was a great pleasure to see the powerful and at the same time active Clydesdale and Percheron horses, which were considerably better represented than the Belgians. We recognized the Ness horse, "Sir Spencer," who captured the championship award for imported horses. Wm. Nussey, also from Howick, won the championship in the Canadian bred class with his aged stallion. We admired the driving horses and roadsters, some of which could perhaps have been better handled. We also took great interest in watching the judges. Theirs is not an easy task. Many showmen are experts in getting their horses to stand and move so as to hide slight defects and infirmities, and the judge has to be on the lookout all the time. Whatever way he decides, there is always somebody who thinks, and sometimes even voice the opinion, that

the judge is not qualified for the job. There may, however, be some satisfaction for him to know—at least if he is philosophically inclined—that, no matter which direction his decisions may go, he has made somebody happy and at least convinced the winning owner and his friends that he is the right man in the right place.

The cattle were numerous and mostly good. Professor Barton told us, among

cattle parade afforded a good opportunity to see and compare the different breeds to advantage. In spite of his watching, the Editor was only antepenultimus in dairy cattle. It was perhaps daring of him to enter in the judging competition, as his two years school teaching had naturally made him a little rusty along this line, but, as he said afterwards, “faint heart never yet won fair (dairy) maid,” and he ap-



A GOOD STRING OF CLYDES.

The Ness Horse, Sir Spencer, at the Head.

other things, that the Jerseys and Holsteins were never shown to better advantage in Sherbrooke than this year. We took special notice of the Short-horns exhibited by the two well-known breeders, Messrs. J. M. Parker, Lennoxville, and F. R. Cromwell, Cookshire. Excellent Ayrshires were shown by D. T. Ness, Howick ; James Boden & Sons, Danville, and others. C. R. Ruiter & Sons, Cowansville, were the leading exhibitors in the Jersey class. The

parently found some consolation in the well known fact that “aliquando bonus dormitavit Homerus.”

I had intended to see the sheep, the pigs and the hens that day in the Editor's company, but had to leave him for other more important business. When we met in the hotel rotunda after the day's work, I made him reel off his film. How were the pigs? At first he only answered: “Some good and some—not so good.” However, after he had en-

joyed his meal, for a while, he became more communicative, and started off on his own accord :—" It is simply wonderful how some of these men have succeeded in fitting their pigs. Do you know, they must have actually thought pig, talked pig, dreamt pig and fed pig for 365 days of the year in order to accomplish what they have done. You should have seen McCulough Bros.' Yorkshires, or W. Miller's Chester Whites, or John Harvey's Berkshires. They were simply great. The red ones were not nearly so good, and I do not like them except in a sporting way. Mr. MacMillan was over in the sheep barn, and he looked quite at home in his light blue overalls. He showed me the College demonstration flock of Cheviots, and was also kind enough to demonstrate Allan Bros.' Leicesters and A. W. Oughtred's Hampshires. You should go up there to-morrow before Mr. MacMillan leaves. It is a great help to have an expert show you instead of trying to find out things for yourself, especially when you have no catalogue to follow."

" I was over in the Poultry Building, and would have liked very much to have had a talk with Mr. George Robertson, but he was too busy judging. By the way, is it not a good thing that practically all experts seem to have been provided with an almost inexhaustible supply of patience? Perhaps it is a case of "*gaudet tentamine virtus*," but one would think they might get tired sometimes at having practically the same question thrown at them over and over again. Some of them must have dived to the bottom of the fountain of wisdom and have let the bubbling waters teach them the meaning of "*gutta cavat lapidem, non vi sed saepe cadendo*."

After a little deviation, Mac's mind returned to the poultry exhibit, and he told me with an absolutely serious face that some of the pullets in the school exhibit, arranged by the Poultry Department of Macdonald College, were better than those in the exhibition proper. You see, he had helped to arrange the school exhibit and felt quite satisfied with himself, and also with the chickens. These numbered not less than 303 birds, all of the Macdonald Plymouth stock, for which eggs had been distributed last spring to the pupils of the Lennoxville Academy and to rural schools in the vicinity of Sherbrooke. This school exhibit also included a potato and seed oat competition. The children had really done their best to grow first-class crops, and most of them had made a wise selection of material for their exhibits.

Before bidding each other good night, we agreed to see a horse race next day, and to visit the building containing the educational exhibits.

The following afternoon we consequently cried for "*panem et circenses*," i.e., we bought some pop corn and a couple of grand stand tickets. While the trainers warmed up the horses round the race course, the clowns and the society dancers on the grand stand did their best to amuse the audience. Even the poorest of clowns can always be sure of a moderately good reception, but the public in general did not seem to think much of the choreographic performances. "The man who sings to beat the band," as the programme said, had a very, very strong voice—and that was about all.

In the meantime the horses were ready to start, or at least, their owners agreed to commence starting. Do not for a moment imagine that they really

started. No, they had to start over and over again, seven different times, and the man with the megaphone and the bell had the time of his life, shouting, ringing, and presumably swearing. He finally lost his temper, and with the expression of a Cicero he summoned the sulking sulky drivers to the tribune. We expected to hear a "quosque tandem Catilina" in grand style, but all he said was, "Jim, if you don't pull up that devil of a mare of yours, I will rule you off the track." His speech apparently had the desired effect, or else he must have been as tired as many of the spectators. for he sent them off with a "go" at the eighth attempt. "Facile erit inventis addere," but we had seen enough horse racing for a day, and as our pop corn supply was exhausted, we decided to imitate the Shah of Persia, who knew that some horse must be the fastest and did not give a continental which horse came first.

The educational exhibit was housed in the Transportation Building, where fruit, vegetables and field crops were also displayed. Our Editor did not approve of most of the grain samples and told me that he would not have liked to be in Mr. Summerby's clothes. "It must be very difficult to judge oats of that kind."—The fates apparently approved of this modesty of Mac's, as they recompensed him by letting him capture first prize in the seed oat judging competition the next day.—After having tasted some maple sugar and looked on the forbidden fruit, we sauntered over to the Macdonald corner. The various departments had done their best to make the display as interesting and instructive as possible. Visiting farmers also showed their appreciation in more than one way, not least by asking information of

different points from the attending members of the staff.

We followed their example, and stopped first at Mr. Jull's egg factory, studied the charts showing best rations for satisfying the epicurean taste of the hen's palate, took a great deal of interest in the different house and trap nest models, and examined the modern feeding batteries in which were to be seen good and poor types of birds for fattening purposes. "Some of those poor ones look peeved," quoth Mac. "Yes," answered Mr. Jull, "they were really better fitted for the racing track than for fattening, with their long legs and razor sharp breasts."

From the Poultry our Editor first turned his searching eyes to the lovely flowers, luscious fruit, and bursting melons of the Horticultural Department; he then went over to the Biology Department, where Professor Fraser held forth on bugs, weeds and plant diseases; had a crack at Mr. Starrek's drainage tiles, and finally landed at the Cereal Husbandry display. Mr. Boving, who had charge of this part, talked roots, of course, but was not at all unwilling to discuss alfalfa, grain and corn. "Man, but this is great . . . good old College," said Mac, thanked every one very politely, and started off on his own business. Do you imagine that he took up "All hail Macdonald?" Not he. As the scholar he is he went away, singing at the top of his voice:

Vivat academia
Vivant professores
Vivat membrum quodlibet,
Vivant membra quaelibet,
Semper sint in flore.

Quondam.

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"Mastery for Service."

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EDITORIAL.

THE WAR.

The great statesman, the great diplomatist, the great strategist, the great organiser, the great Bismarck of immortal fame has said, "Germany will strike when Germany's hour has struck."

Germany's Hour Has Struck.

As this number of our Magazine goes to press, civilization is on its trial, and our universities, as the centres of culture, the seats of learning, the fountains of all that goes to make an enlightened public opinion are being looked to as never before in the history of all time.

That the Universities throughout the British Empire are shouldering their responsibility, both moral and military, is proven to the hilt.

The halls of Oxford and of Cambridge are resounding as never before with the clanking of the sword and the jingling of the spur. The other Universities of the old land are likewise in the van; and when we come to our own Dominion we find the spirit of loyalty is the very breath of life itself.

Queens, Toronto, and our Alma Mater, "Old McGill," are alive and throbbing with Imperial Unity.

It is, however, of our own particular college—"We are a chip of old McGill, we call ourselves Macdonald"—of which we wish to write.

Mention is made elsewhere of our boys, past and present, who have joined the forces of the King, and obeyed the clarion call.

And what are the rest of us doing? At a meeting of the men students, held some little time ago, Principal Harrison briefly laid bare the position of affairs in Europe. He made it perfectly clear that he was not asking men to volunteer for active service. That, he said, was a matter which could be decided only by the dictates of one's own conscience. What he wished to point out to us was the insecure position of our own immediate part of the Empire, and our inability to defend ourselves and our homes if the necessity should ever arise. Dr. Harrison asked us to consider the desirability of forming as a precautionary measure an "Officers Training Corps."

Having assured us that should we decide upon forming such a corps, he would be ready to do his utmost in the furtherance of the scheme, he left the matter with us.

A few days later a meeting was called by Ricker, the President of the Students' Council, and we are proud of the fact that, almost to a man, the men of the student body of Macdonald College, decided in favour of forming a branch of the Officers Training Corps. The fact that many of the Faculty and Staff have become members of the same corps is doubly gratifying.

We feel that our national duty demands it of us, that our physical health will benefit thereby, and that we will be fitter and better citizens of our Dominion and of the Empire of which we are proud to form a part.

In the words of Mr. Asquith, "let us go, each one of us to his or her appropriate part in the great common task" . . . "let us recall the memories of the great men and the great deeds of the past" . . . "not forgetting the dying message of the younger Pitt—'England has saved herself by her exertions and will, I trust, save Europe by her example.'"

In one of his most recent speeches—one of the greatest he has ever delivered—Mr. David Lloyd George concluded, "We have been living in a sheltered valley for generations. We have been too comfortable, too indulgent, many perhaps too selfish. And the stern hand of fate has scourged us to an elevation where we can see the great everlasting things that matter for a nation, the great peaks of honour we had forgotten, duty and patriotism clad in glittering white, the great pinnacle of sacrifice pointing like a rugged finger to Heaven.

We shall descend into the valleys again, but as long as the men and women of this generation last, they will carry in their hearts the image of these great mountain peaks whose fingers are unshaken, though Europe rock and sway in the convulsions of a great war."



LORD ROSEBERY ON THE "CORPORATE LIFE OF UNIVERSITIES."

As Chacellor of the University of London, Lord Rosebery recently made some interesting remarks on the comradeship of common life in the Universities.

The occasion was the laying of the foundation stone of Queen Mary's Hostel (Residence) at Campden Hill.

"In these modern days," he said, "Universities without Colleges (for residence) are far more common than those which are happily endowed with them. In Scotland I have been connected with several Universities few of which—I think perhaps only St. Andrews—have any such hostel as that which we are founding here; and though I have an immeasurable respect for these Universities, I cannot help feeling in the bottom of my heart that the College training, the College comradeship, superadded to the University training, is the really perfect kind of University teaching.

Without the comradeship of a common life, I cannot believe that any student, however fortunate he may be in the University, has received the highest and truest seal of University life."

To us, as undergraduates of McGill University, it is more than gratifying to find an authority of Lord Roseberry's eminence, responsible for so notable an utterance on a University problem.

We know, we realise, and we are grateful for the privileges which pertain to residence in the halls of Macdonald College.

We make bold to say that were it not for our residential halls, our whole student life would be cast in another and less happy mould. We who have been partakers in the comradeship of which Lord Roseberry speaks can say from the very depths of our hearts that we have tasted of the fruits of this comradeship and we offer to him our belated, but none the less sincere, thanks for this trenchant endorsement of the munificent and far-seeing policy of our founder—Sir William Macdonald.



When this issue of the Magazine appears before our readers, Macdonald College will have entered well into the new College year, a year which we one and all hope will be attended with all that which goes to make college life for the student a real success.

It is always well to be hopeful, and the best time to be in such a frame of mind is when one has the future to look to, to plan for, and believe in. We still have our College year before us, unspoiled and unused. It is up to us, as students, to get the best out of the time which it is our good fortune to be able to spend here. We are, indeed, a privileged few, those of us who come or are sent here, to enjoy the benefits of such a magnificent institution as this is, an institution furnished and equipped in a manner

probably not equalled upon the continent.

We have now established our College activities, and the machinery which gives rhythm, harmony and enjoyment to our College life has been set in motion. Probably the officers of these different activities were never chosen with more deliberation and care, and as a result they are in charge of persons of good tact and executive ability. These organizations, however, will never succeed unless we, as persons interested in our own welfare and that of the College, see to it that we do our part in helping to make the work of these bodies a success. If we are lacking in finish along literary lines that is a reason why we should struggle to do our best to become a person who thinks and speaks on his feet, not an excuse for a non-participation in the work of the Society. The object of all our Literary Societies is to train the untrained, to develop the latent powers of imagination, quick thought, and logical reasoning, all of which are needed by us all.

In addition to this, our Magazine is a medium by which students are enabled to improve themselves in many ways by contributing short articles of interest to its pages. True, these articles may not be perfect, but the training which they afford is too important to be missed. We are too apt to think it is an unpleasant task to be asked to write an article, whereas if we look at it in its true light we should treat it as a compliment.

Let us all then do our best to forward the work of these organizations. He who gives most receives most, and if we wish at the end of our College year to have a pleasant retrospective and to feel that we have gained in ability of all kinds, we must see to it that we start *now* to create that feeling, which only comes from the accomplishment of duty.



Progressive Agriculture in Sherbrooke County.



CONSIDERABLE has been said and written regarding agricultural conditions in some of our more important counties. However, a little time spent in considering conditions in what is perhaps one of the most progressive agricultural districts in the province ought to be quite refreshing to us.

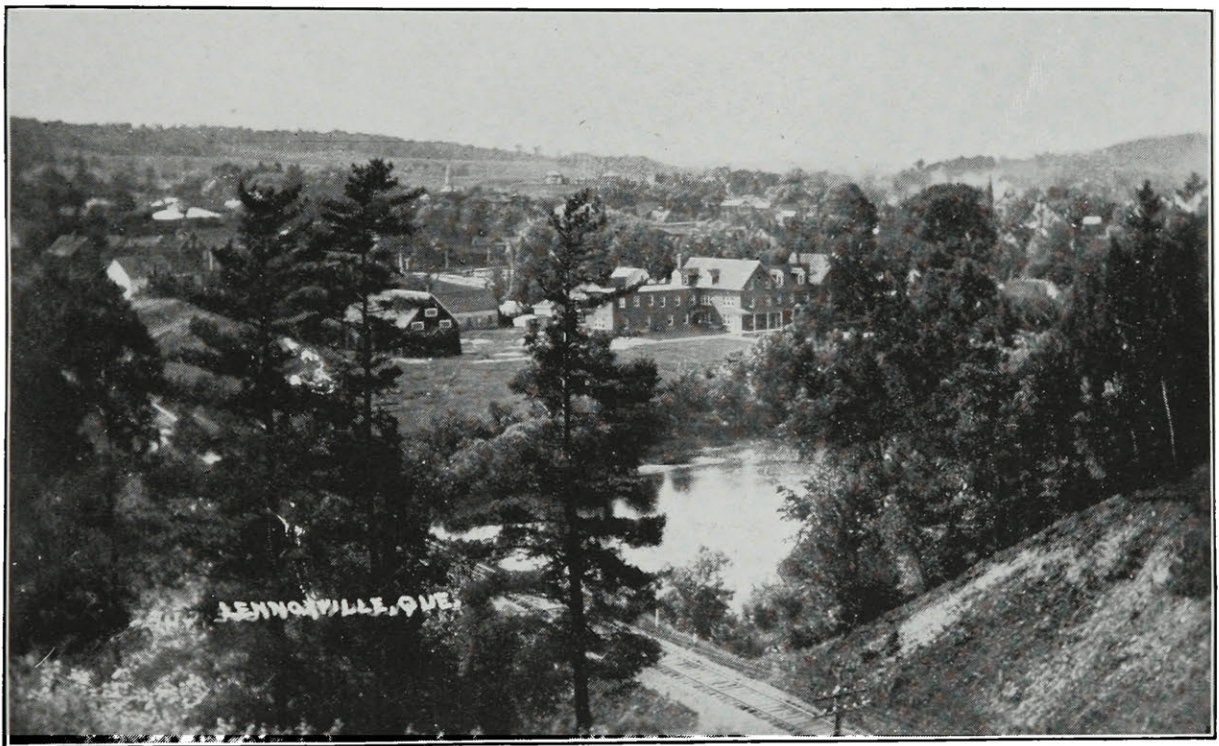
That the farmers of Lennoxville district are prosperous cannot be doubted. The writer has been well convinced from the farms visited that from an agricultural point of view this district is prosperous. The soils are strong and productive, with water in abundance and of the best quality. Such lands afford fine pasture, and consequently we find large well kept flocks and herds. The houses and barns are comfortable, home-like, and convenient. The excellent pasture-lands afford great opportunities for stock raising, and almost every farmer goes in for beef-raising and dairying combined, having as his ideal

cow the dairy shorthorn. Milk and cream are shipped to Montreal, besides supplying the city of Sherbrooke, through "The Pure Milk Company" and other local dealers. In all, the general impression which is presented to one is that of prosperity.

Even though the farmers are prosperous they do not hesitate to make use of the opportunities they have for enlightening themselves on up-to-date agriculture. They have one of the best agricultural societies and one of the best farmers' clubs that could be wished for. Both are largely subscribed to, and an active interest is taken in each by a very large per cent. of the farmers. The new experimental farm which was started this last Spring by the Dominion Government, and which is under the superintendence of Mr. John McClary, has made many changes, and great are the results expected and looked forward to by the surrounding neighbourhood. No doubt this will prove a great boon to the Lennoxville farmers.

Besides, the County of Sherbrooke has had at its disposal for the last few years a Macdonald College graduate, under whose supervision smaller experiments of many different kinds have been worked out with fertilizers, production of root seed, alfalfa, etc. Clover seed production is another movement which has started up of late. A clover huller is now owned in the county, and many have cut their clover fields early this season with the idea of harvesting a crop of seed later on. The farmers are

their land free of charge after construction. Already the experimental farm has underdrained a considerable area, and no doubt when the people see that these lands, which before could produce at best but a poor crop, are made to give splendid returns, there will be fewer with the excuse that the high cost of underdrainage is their reason for not performing the operation. This is one of the things the farmers in this district should be more enthusiastic in than they are, because considerable areas, some



General View of Lennoxville.

beginning to realize how easily they may introduce and spread new weeds on their farms, and, owing to the high price of clover seed and the higher per cent. of germination of home-grown seed, the value of this crop is beginning to be appreciated more and more.

Underdrainage is the cry of all leading agriculturists of to-day, and some of the farmers of this district have been quick to appreciate the generous offer of the Provincial Government to have an expert make a drainage survey of

small and others large, are sour, and would profit greatly by underdrainage.

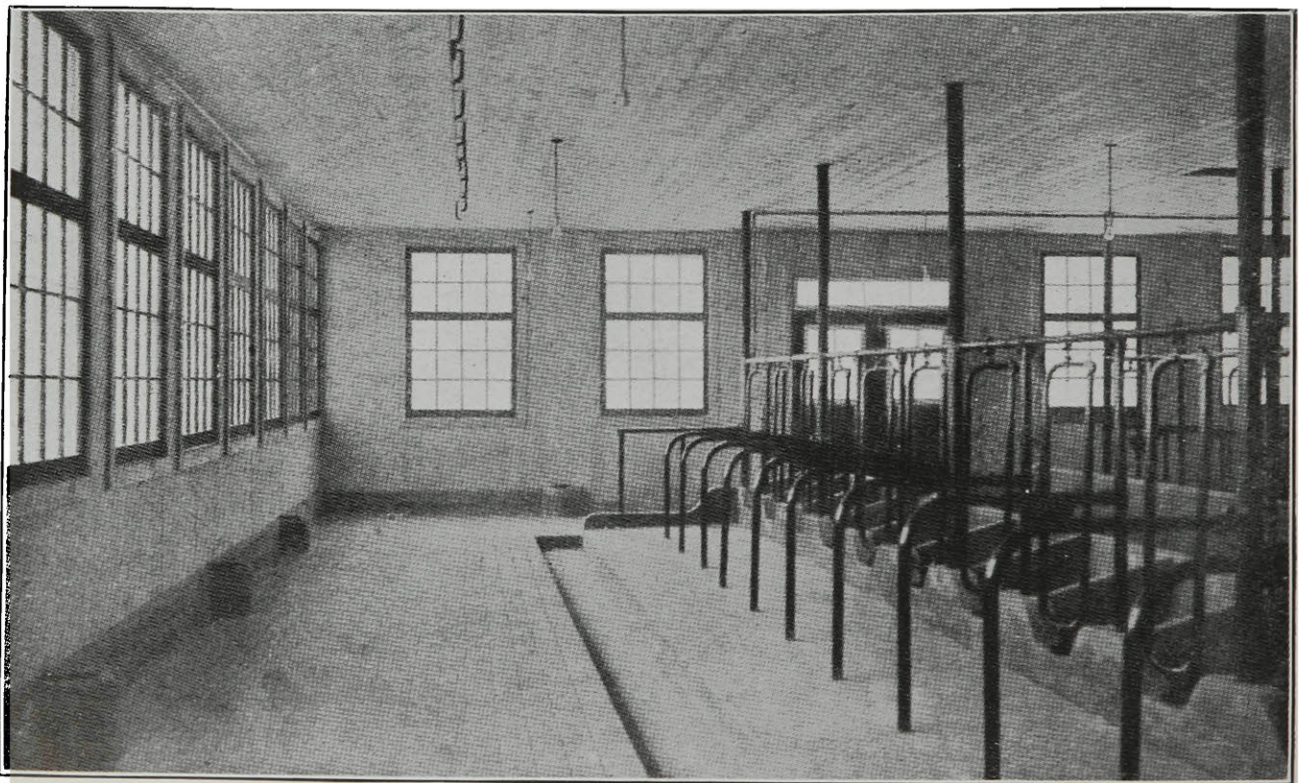
Another important branch in agriculture that the farmers of this district are realizing the importance of is the sheep industry. It is a known fact that there are no better grazing areas than the hillsides of the Eastern Townships, and particularly is this true of this district. It is also known that sheep are one of the best weed destroyers we have. I am told that, but a few years ago, every farmer in this district had

his flock of sheep, which paid him well, even though he had to sell his lambs at from \$2 to \$3 each. Now-a-days the price is more than double, and it is a poor lamb that will not bring \$6. With this in view, and in view of the fact that weeds are becoming more troublesome each year since the sheep have been discarded, an effort has been made to revive the industry, which should never have been allowed to decline. Dog laws are being enacted for the protection of the sheep and associations formed for the better marketing of wool. A de-

monstration flock of Cheviot sheep has been placed on the farm of Mr. W. J. Parnell, with the intention of introducing a breed of sheep suited to the conditions of this district. From present indications the sheep industry is likely to be soon on a par with the other branches of agriculture.

In summing up one cannot help but conclude that the Lennoxville farmers are in the fore ranks of progressive agriculture, and great things may be expected in the near future.

G. C. HAY, '16.



INSIDE THE MODEL DAIRY BARN.

Note Light, Air Inlets and Out-take, and Cement Construction.

Putting on the Emergency Power in Farming.

Making Canada the Granary of the Empire.

By H. H. Biggert, Hamilton, Ont., Superintendent of the International Harvester Company of Canada, Limited.



THE history of all great wars has shown that the man at home behind the plow fought shoulder to shoulder with the man at the front behind the gun. In times past, without the first the latter would have starved, and without the second the former would have been destroyed.

Such a crisis has not yet come in the present conflict, but the silent appeal of the Mother Country to all her colonies has been heard around the world—an appeal for supplies, for bread, for hay, for horses, and for moral support.

Already across the border the American farmer is fortifying himself to meet the increased demand which will be made upon him for his produce. He is increasing his acreage and everywhere is re-echoing the appeal to him to improve his methods in order that his acreage yield may be increased. The impulse which is swaying him to answer the emergency call should meet with double response from the tillers of the soil in this country, where not only the dictates of business urge them on, but where there is the added incentive of higher consideration of patriotism. As a man doubles his strength when tightly

pressed, or an engine exceeds its rated capacity when forged ahead, so should the Canadian farmers multiply their energy and strive to excel their past good records as producers of the world's bread.

The recent appeal of the Honorable Martin Burrell, Minister of Agriculture, showed definitely the business advantage of beginning at once to prepare for a greater acreage of wheat. "The only way to get more wheat," said he, "is to properly and most carefully handle the stubble land." Let it be the determination of every farmer to make his wheat acres in 1915 yield as never before. It is certain that an increase of many millions of bushels can be insured if every farmer on the prairies will carefully consider the following suggestions and put them into practice immediately:

SUMMER FALLOW.

"The summer fallow—Get the summer fallow into good shape; let it be ready for the seeder the moment the snow goes, and put it into such shape as to be free from weeds, ready to absorb moisture, and as safe as possible from evaporation.

STUBBLE LAND.

"Stubble land—Every acre of stubble land in good enough shape to be fairly safe for wheat should be plowed right now; plow not less than seven inches deep, and deeper if the character of the soil and moisture content will permit; deep soils should be plowed deeply, shallow or light soils with a more shallow furrow; do the plowing well; every acre should be harrowed within two days after plowing and pack the land if possible after harrowing.

SPRING WORK.

"Spring work—Early seeding is the next consideration; make every preparation now and this coming winter, to lose no time when the spring opens; be sure the seed saved is clean, and of high germinating quality; get the best variety possible; do the work well at seeding time, cultivating or disking before seeding always means bigger and better crops, and in districts where the crops were a failure this year, the methods outlined above are particularly necessary."

We would emphasize especially the necessity of frequent disking, and the almost essential use of the land packer as a safeguard against drought. Many thousands of farmers, for the first time, last year staked their crops on the land packer, and owing to the unseasonable dryness which prevailed this season, it is estimated by many authorities that the use of this machine, wherever used, made a difference of 6 to 12 bushels per acre. At the price at which they are disposing of their wheat this year, the packer has proved an investment worth several hundred per cent. to them the first year of its use.

PREPARING THE SEED BED.

In those parts of the country which do fall plowing and fall seeding, the way the seed bed is made and the way the sowing is done this fall will determine the crop per acre next year more than next year's rainfall, hot winds or frosts. In an experiment not long ago described by F. L. Peterson, of the University Farm, at Davis, California, he says:

"As the pressure for supplies becomes greater, it becomes more evident that the world cannot afford large farms skimmed over with careless culture. In an actual experiment a gain of 200 per cent. which was made in the productiveness of a certain area, 100 per cent was found to be due to better plowing and harrowing, 50 per cent to better cultivation, and the rest to better seed."

A lesson or two like that in every community would soon work its way into farm operation in such a way that several costly practices sanctioned by time and custom would become in a short time as historical as cradling wheat and threshing it with a flail are now. The great economic law which makes a man's land profitable is not so much the price he gets for his produce as it is the difference between this price and the amount spent in producing this produce. The above experiment was apropos of the tractor—a mechanical way of plowing and of disking—a mechanical way of massaging the land, so to speak, and of drilling—a mechanical way of sowing the seed. In the cost of raising a crop, just the same as in the cost of making carpets, shoes or wagons, hand power and animal power cannot compete with mechanical power. The mechanically prepared seed-bed not only costs less in its preparation, but it gives forth more in its harvest.

THE WAR WILL MAKE HORSES TOO COSTLY TO KEEP.

Oats and oil are in the throes of a little war of their own just the same as the human back once combatted with the reaper knife. This strife is fast becoming more acute because the price of horses is being accentuated every day by the number being sold out of the country for cavalry mounts to be used abroad. The drain upon the Canadian horse supply will soon be such that wherever possible mechanical contrivances will be used to do their work. Were we to begin at once, it will require five years to replenish the drain which the war has already made upon the horse supply of the world. The United States Government Department of Agriculture has estimated that it costs \$75.00 to \$80.00 per year to keep a horse, and in the study of horse utility for a period covering six years, it was found that he averaged only 3.14 hours of work per day as his contribution to lessening the high cost of living. In contrast with this it was found that he ate up the entire yield of one out of every five acres which he helped to cultivate. It has been shown, too, for every hour he worked it cost about 16 cents; whereas, a full horse-power hour can be delivered by a high-grade oil engine for only two cents per hour, in both cases interest, fuel, food and depreciation being included. Again, in plowing, a team of two horses can plow only about two acres per day. In doing this, they travel sixteen miles, which is a good day's pull for horses with a load. An oil tractor, on the other hand, will plow deeper and keep it up twenty-four hours each day until the work is completed without feeding, resting, or growing thin. While it would not be wise to dispose of brood mares and blooded stock to satisfy the demands of the war, in the

end perhaps the increased prices which the present horse purchases will undoubtedly bring about will be beneficial in forcing thousands of farmers to adopt a newer and more economical form of power. Everyone who cultivates 160 acres or more is a candidate for a share in the millions of dollars which the country-wide adoption of this method of plowing will ultimately save.

INSURING THE CROP IN ADVANCE.

After plowing, the first duty of a man is to guarantee the work by proper cultivation and disking and packing. The disk harrow and packer are two of the leading nature aiders in farming. It is said that, rightly used, the disk does more to increase crop profits than any other farm implement and should be used on every farm. It is one of the simplest implements made; one of the easiest to obtain; simple to run; will stand much hard work; and lasts a long time. It is so inexpensive that if used on a fair sized field it will so increase the production that it soon pays for itself.

SEEDING HELPS MAKE THE CROPS SECURE.

After the seed-bed is in a condition satisfactory for the proper development of the seed, the next important step is to be sure that the seed is sown just right. It is only within recent years that definite, decisive tests have been made between sowing with a drill and sowing broadcast, but so one-sided have been the various tests in regard to these two methods that broadcasting is fast being numbered among the many old methods which farmers are now discarding. Broadcasting requires more seed, and yet it produces a smaller crop of lower grade grain. The reason for this is

that the seed thus sown is not distributed evenly over the ground. It does not all start from an even depth, nor does it begin germinating uniformly. By the use of an ordinary drill, even without the more modern attachments, the seed is deposited in fine, slightly compact, moist soil, all of it at a uniform depth. It is thus carefully covered by the cover chains or press wheels, it all has an even chance of germinating, and all the grain will tend to ripen at the same time. It requires, furthermore, much less seed to get a good stand with a drill than by broadcasting.

Proper disking and packing and proper sowing are the best ways to help nature

give a good crop. There is very little more expense in doing it right than in doing it wrong, and the returns are much greater.

Our work begins this fall in our plowing and seeding, and our opportunity to help will come next year at our harvesting and selling. We have more at stake than our profits. Towering over everything and stifling our selfish hope of gain or our commercial instincts is our ability and our willingness to meet the call upon us which we know will result from the waste and devastation of the present unfortunate conflict into which the Mother Country has been drawn.

Trifles.

Only a spar from a broken ship,

Washed by a careless wave;

But it brought back the smile of a
vanquished lip,

And his past peered out of the grave.

Only a leaf that an idle breeze

Tossed at her passing feet,

But she seemed to stand under the dear
old trees,

And life again was sweet.

Only the bar of a tender strain

They sang in days gone by ;

But the old love woke in her heart
again,

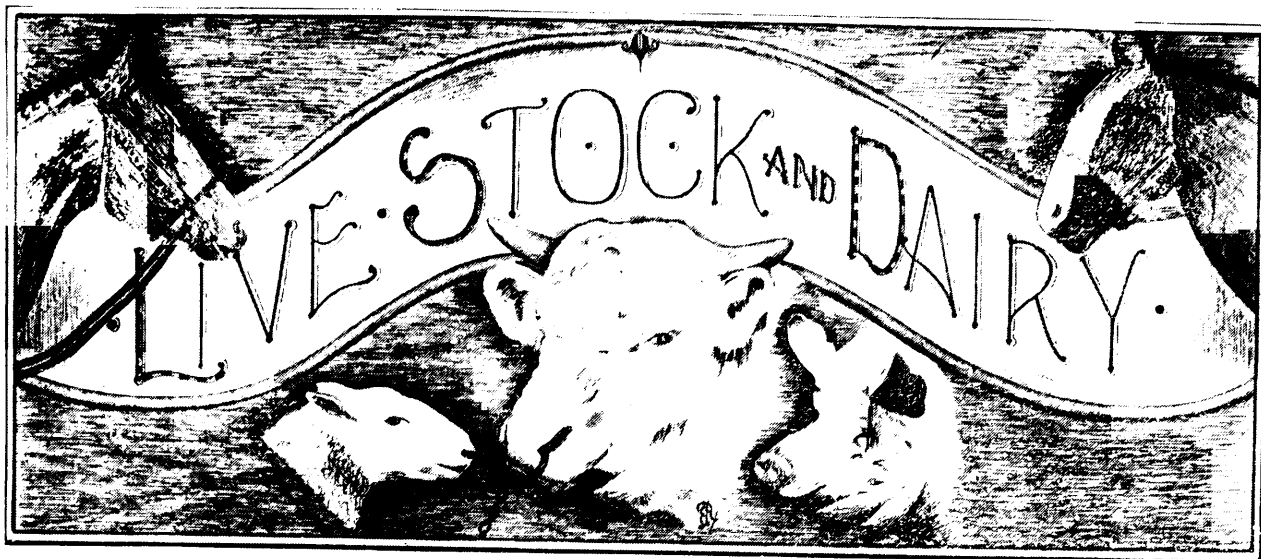
The love they had sworn should die.

Who vaunts the might of a human will,

When a perfume or a sound

Can wake a past that we bade lie still,
And open a long-closed wound ?

—*Ella Wheeler Wilcox.*



A Few Hints on Sanitation.



SANITATION has become a living reality in this advanced era of Agriculture, and the farmer or stock-owner is almost compelled to adhere to the general principles of cleanliness.

The farmer may raise the cry that it is altogether too advanced and costly for him to attempt such an undertaking, but all that he needs is a few hints from men that are experts along such lines to convince him otherwise. The average farmer will find that although he is not in the sanitary milk trade, a good barn, properly constructed, will be of great advantage to him, both in saving of labor and production of milk, for without a good modern equipment he cannot run a prosperous and lasting business.

Let us take the new dairy barn on the Experimental Farm at Ottawa, shown in an accompanying cut as our general model, and with a few changes make an economic and sanitary barn fit for the production of the highest class of milk. First, let us consider the site. A slight elevation is the best, as it ensures good drainage facilities, along with this should come considerable protection from the

prevailing winds, but due care should be taken to secure plenty of sunlight, as it is one of the most necessary agents. Thus, with a good elevation, plenty of sun and a wind-break we are ready to start the foundation. It is advisable to have the stable floor raised a foot or so above the earth to secure proper drainage and freedom from dampness. Where the foundation is set into a side hill drainage tile should be laid all round and just below the foundation. This affords proper drainage and does away with cold floors and damp stables with wet side walls. A cement floor is the cheapest and best, but care should be taken in preparing the foundation; it should be underlaid with well crushed field stone and covered with a five inch mixture of seven to one, the top coat two inches thick with the proportions three to one. The mangers should be so constructed that a cow shoving her food over the edge would lose sight of it and thus stop her reaching over the edge of the manger, which not only causes waste of litter but sore shoulders and bruised knees.

The main structure of the barn can be either a plank frame or a timber frame,

according to the locality, a plank frame being preferable for finishing purposes; a hipped-roof, well supported and covered with tin or galvanized iron, saves labor and lumber. To have a dry stable it is necessary to have insulation. This requires an air space in your walls which may be procured as follows:—Place uprights, six by two edgewise every three or four feet, on the outside lay common building paper running up and

should have as much glass as possible without weakening the structure of the barn, say from 15 to 19 square feet per head. A well lighted barn not only looks bright and cheery, but at the same time the sunlight destroys bacteria and aids in sanitary production. Ventilation goes hand in hand with all these conditions, and an improved system should be installed, Rutherford's being a universal favourite. The milk room and



Outside View of Model Barn. For Inside View see page 20.

down, on top of this planed or matched lumber, on the inside next the studding a thick patent fibre wall paper called "Linofelt," and over this $\frac{7}{8}$ inch matched lumber. The ceiling is sheathed, and the upper floor should be made strong as it aids greatly in the durability of the barn. The following has given great success: first a rough floor laid at an angle across the joist, then on top matched lumber running lengthwise. A stable constructed in this manner is practically airtight.

Sunlight being very essential, one

other attachments can be placed to suit the situation.

Now that I have, in a very vague way, outlined some primitive methods to help advance sanitation, allow me to point out to my readers that it lies entirely with you, as farmers, to follow sanitary methods, for by so doing you improve your milk, which leads to the production of high-class butter and cheese. The dairy proprietor is the man at the helm, therefore his aim should be to produce a high-grade finished product.

G. C. BOYCE, '15.



The Horticultural Department.



THE last edition of the Canada Year Book gives as the total value of the vegetable crop in the Province of Quebec, in 1911—\$5,638,534, orchard fruits, \$1,189,926, small fruits \$279,611, and honey and wax \$280,248, or a total value of \$7,388,319, which is an increase of 175% over the 1901 total value. The province does not by any means produce all the fruits, vegetables and honey consumed by her home markets, for much is brought in from the sister provinces, the states to the south of us, and even from foreign countries, the larger part of which is produce other than that which can be profitably grown in this province. The province, however, can grow more of this produce and it is to be expected that even larger increases will be shown in the future.

The College has done much to encourage this industry along the proper lines, not only through instruction to the regular and short course students, but also through addresses and practical demonstrations given at meetings in various parts of the province and by articles in the press and correspondence directly with the producer, and in this

way the College reaches a large number of the farmers and fruit growers.

At the College there are some seventy acres of orchard, small fruits and vegetable gardens, the produce from this going to supply, in part, the College dining department and the various families living on the campus and in the near vicinity of the College grounds. From time to time part of the produce is disposed of in Montreal or elsewhere when necessary.

In the growing of this produce, much information, experimental and practical, is obtained, not only in regard to varieties but also in regard to cultural practices, and the following lines of work are briefly mentioned to give some idea of the work.

Orchard.—The main orchard, of which the older part was planted nine years ago, is now coming into bearing and from the large number of varieties, over seventy-five, we expect to get some very useful information in regard to hardiness, vigor, bearing habit and general productiveness of these varieties, and also the quality and texture of the fruit and its desirableness under our conditions in Quebec. Among this large number of varieties some are little known and

others are comparatively new varieties, and already some of these are showing up favourably as compared to our better known varieties.

An experiment has been outlined and carried out to date to find out what is the best fertilizer or combination of fertilizer for an orchard. Thirteen different plots, each containing 26 trees, have been used in this experiment, and each plot is treated differently as to the amount and kind of fertilizer applied. So far very

clusively shown that as far as the growth of trees and bringing them into early bearing is concerned, cultivation is much superior to sod and it is expected that even when the extra cost of cultivation is taken into consideration, the returns and profit through a period of fifteen or more years will be considerably higher from the cultivated part of the orchard.

Currants, both red and black, have been among our most profitable crops, followed closely by gooseberries, and we



A Prosperous Plot of Montreal Melons.

little difference can be seen in regard to the size of the trees on the different plots, but now that the trees are coming into bearing we would expect to see some marked differences in regard to their bearing habits. A number of cover crops have been grown with the result that it has been found that hairy vetch, crimson and red clover are the most suitable in the orchard. Cultivation and sod in the young orchard has con-

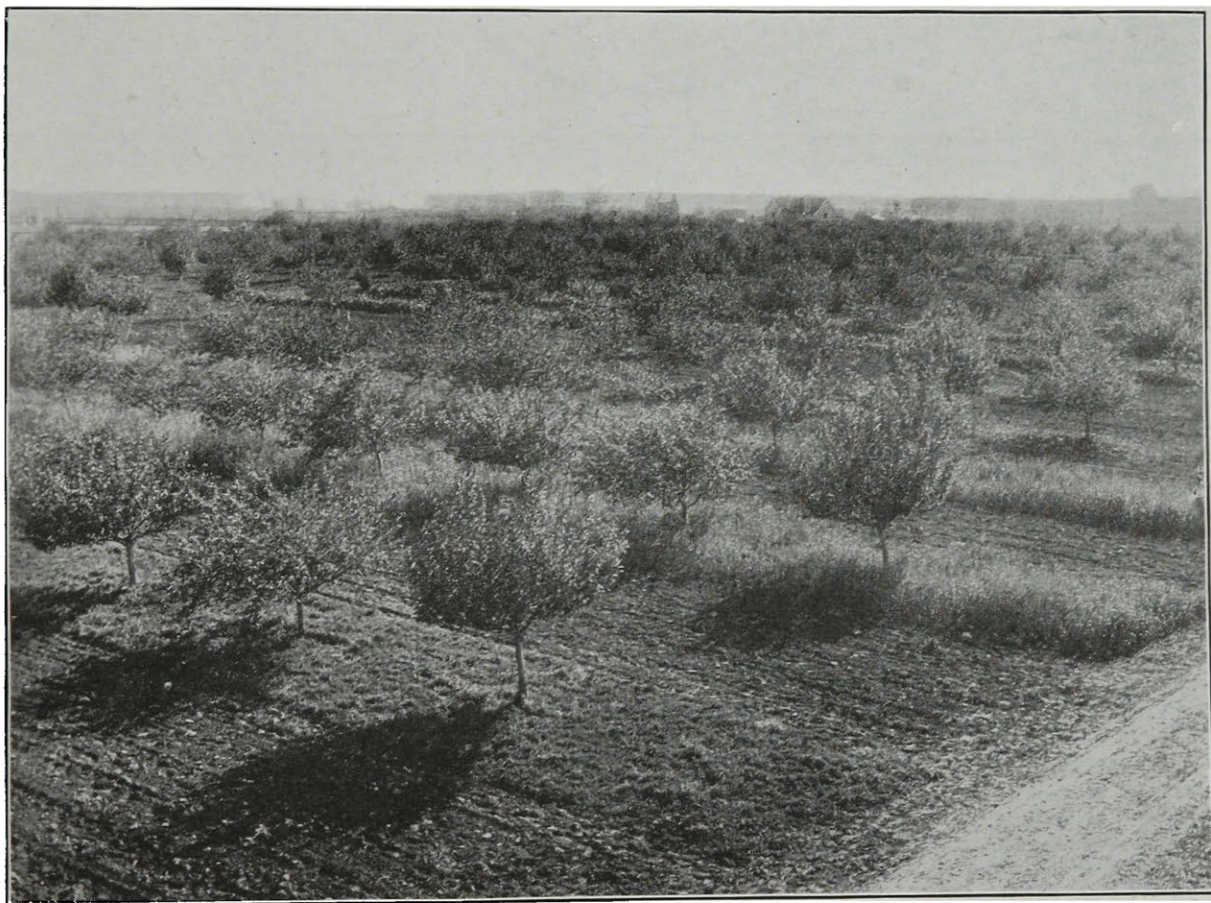
are adding to these plantations. Three years ago a number of varieties of English Gooseberries were planted and these produced a fair crop of fruit this year, comparatively free from mildew, and it is hoped that these can be grown profitably here. The raspberries and strawberries have suffered more from drouths, as the fruit ripens in the driest part of the season, with the result that the crop is never as large as it should be;

however, we expect to irrigate a good part of our strawberries and raspberries next year. Grapes are hardly a commercial proposition, although for home use they can be grown successfully, but they will require protection during the winter and early spring.

A large number of varieties of all the small fruits have been grown, with the result that some have been found to be much better than others for this province.

operation and in the better crops and greater returns per acre of land irrigated.

An apiary, consisting of twenty-five hives of bees, has been quite successfully operated during two seasons, although this season the crop of honey has been below normal. An experiment in wintering bees was conducted last winter, with the result that a method of wintering bees outdoors was found to be quite

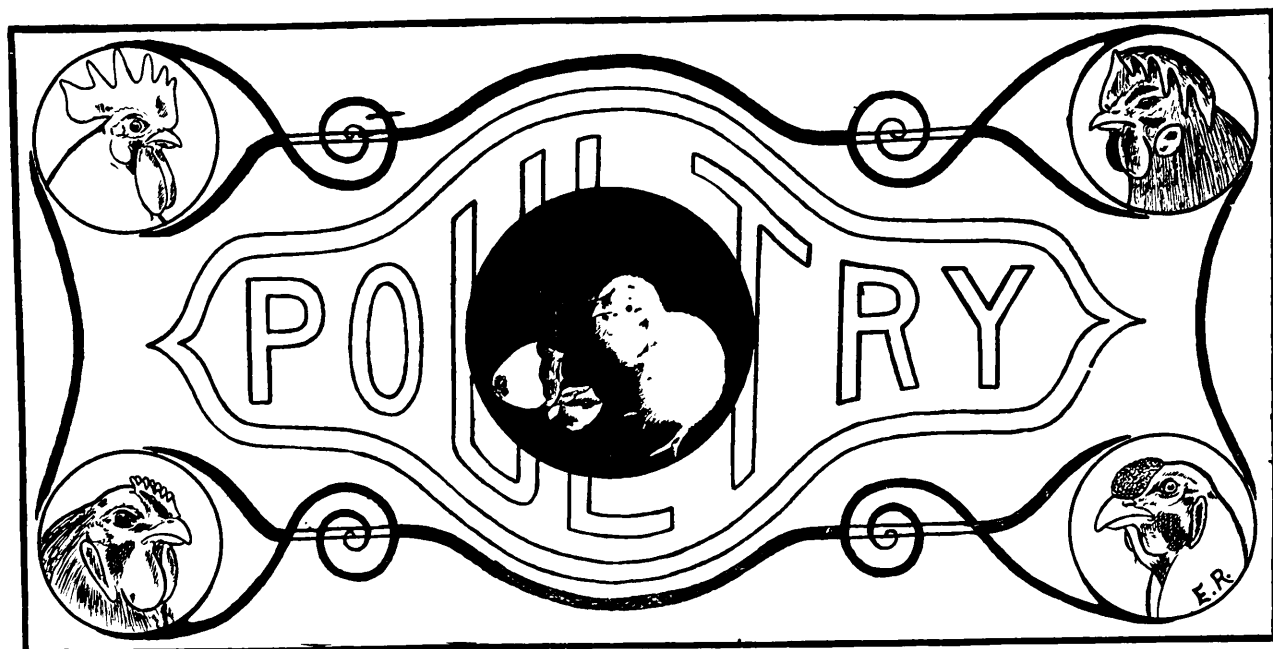


The Orchard.

Vegetables do very well, although the land is not the most suitable for these crops. Variety testing, cultural experiments have been carried out, and during the past two seasons an irrigation system has been used in part. This system will be completed next year, when it is hoped that we will be independent of rainfall as far as these crops are concerned. This irrigation system will give us some very useful information in regard to its cost of

successful as compared to other methods in which some hives were killed out.

The greenhouses always contain considerable interest in the way of flowers and vegetables. A general supply is grown to meet the College needs, which is quite an important undertaking. In the growing of the greenhouse crops, many experiments have been carried out in past years, particularly in tomatoes, melons, cucumbers, lettuce, carnations, chrysanthemums, violets, etc.



A Troublesome Disease.



HAVE often noticed in many farm journals and even in poultry papers, within the last year, notes of this nature:—

“I find that the direct cause of White Diarrhea in chicks can be traced either to overfeeding, drafts, dampness, extreme heat or vermin. The disease starts in the form of indigestion, and one can in a measure overcome the trouble or at least reduce the percentage of loss. As cures are next to impossible, prevention is worth considering. I have cured some cases, although it hardly paid for the bother.”

(Signed) JAS. SMITH.

This is an exact copy of a letter published in a farm journal. To a poultryman, on looking over this note, it would seem to him that he has certainly a great deal to contend with in this disease. Here we have five causes for the disease, some having absolutely no connection with each other; then a statement that cures are almost impossible, and advising prevention as the remedy. As no

methods are given for prevention, I take it that this is the part to figure out for yourself.

The word “cause” is often misused for another word. What the reference should read is: White Diarrhea is induced to a stage where one can recognise it by overfeeding, dampness, extreme heat. However, the word induced in reference to this disease is somewhat modified, as I will explain later.

White Diarrhea, or Bacillary White Diarrhea, as it is correctly known, has a specific cause, namely *Bacterium pullorum*. That it cannot be cured is the statement of Dr. Jones, of Cornell; Dr. Gage; and the Connecticut Experimental Station, where it has been studied for several years. Connecticut was the first to take it up for the reason that it was first brought to their attention. Dr. Rettger, of Yale, isolated the germ *Bacterium pullorum* in his laboratory at the time the Connecticut Station were beginning to study the disease from a poultryman's standpoint, and through some indirect way it was found that both were studying the same disease.

From that time Dr. Rettger has been doing the laboratory work for the Experimental Station in the study of this trouble.

The original source of infection is the ovary of the mother hen. A chick is hatched from an egg laid by a diseased hen and is infected with the disease from the first. Literally speaking, the chick is born with the germ in its organs, and the destructive work starts at an early age. The trouble may also spread through the media of infected food and water. As a rule, infected chicks make less satisfactory growth than those that are apparently normal. For some time they appear stunted and weak, but may eventually undergo more or less complete development. Female chicks which survive often continue to harbor the germ and may become permanent bacillus carriers. As such they are a constant source of infection.

The symptoms may vary somewhat, as in many other diseases. At an early age chicks die without any prominent symptoms except perhaps that of weakness. The characteristic whitish discharge from the vent soon appears, however, and may be slight or abundant. Another prominent sign is that the chicks go off their feed and become sleepy and are inclined to huddle together and remain under the hover most of the time. The wings begin to droop and the feathers ruffled. The chicks often appear short-backed and their abdomen to protrude out of proportion. Sometimes they die suddenly while appearing fairly strong. As the disease is prolonged the chicks gradually waste away and the muscles in the wings, breasts and legs lose their control.

According to the continuous experiments of the Connecticut Station the period of grave danger of infection is within the first three days after hatching.

The feeding of sour milk as a cure was carried on for a long time. It was found out, however, that cures were impossible, but the feeding of sour milk to chicks is still being carried on as a prevention from outside infection and as a method of lessening the mortality. The principle in the feeding of sour milk is the action of the lactic acid as a tonic. It has appeared to me during the last two years which I have fed sour milk to chicks and from what others have told me who practised the same feeding, that sour skim-milk is a great benefit to chicks even though the flock is entirely free from white diarrhea. It seems to put lots of vitality into the chick, which will, of course, lower mortality too. I always teach the chicks to drink the sour milk before they know what water is, and it is surprising how well they relish it even after they have grown to maturity. Prof. Rice, of Cornell, considers that sour skim-milk is worth 14c. a quart for feeding value to chicks, that is, reckoning on the amount of gain in weight of sour milk-fed chickens over those not fed sour milk. The skim milk is just as good as the whole milk and is more economical.

As stated before, there is no cure for this disease, and the elimination of the infected layers is the only way possible of keeping it in check. The first method for determining whether a certain flock was infected led to the direct examination of mature hens. Hens were selected, killed, and their ovaries examined. The object of this was to obtain an idea as to possibility of infection. It needs no expert to distinguish a normal ovary from that of one affected with *Bacterium pullorum*. In the mature hen the normal ovary is made up of numerous ova of various sizes and the developed ova range in color from a light yellow to a rich yoke

color, and take the shape of the yoke in the egg. In a typical diseased ovary we have a less healthful appearance. Some of the ova may be normal, but most of them are somewhat angular, darker in color and more or less mottled. The contents are characteristic in that they chiefly consist of a cheesy matter.

The first most satisfactory method for diagnosis was the bacteriological examination of the eggs. This has to be carried on in a laboratory and embodies a lot of work as well as a great deal of equipment. Dr. Jones, of Cornell, has recently made further steps in this determination. He has invented an apparatus for the detection of the disease in the blood of the hen. In this case only a small amount of blood is needed, while in the egg test many eggs from one flock or pen have to be examined, which makes the testing rather cumbersome. Connecticut has a scheme which it hopes to inaugurate and which will probably be carried out elsewhere if successful. The Experimental Station will, for a small fee, test the blood from hens for any farmer or poultryman who requests it. The station furnishes a mailing case with a

small bottle, giving directions for drawing a blood sample. Each bird in this case is leg-banded, and each blood sample is labelled with the leg band number. In this way the poultryman will be able, at a very small expense, to find out just how his flock stands.

The white diarrhea myth has perhaps been lauded a little too freely in many sections of the country. Many people having heard a little about the disease at once begin to look for trouble, and succeed in digging it up within a short time. In other words, they just imagine things. I was told by one of the men who has been making a study of this disease, that many persons report great damage done by white diarrhea, but which investigation proves to be a result of feeding troubles. A great deal of the trouble that is called by the name is not bacillary white diarrhea, and that trouble, like many other troubles, tends to disappear under good sanitary conditions. As a matter of fact, there is no disease that poultrymen need to dread if they avoid contaminated soil, filthy runs and ill ventilated houses.

C. F. PETERSON, '16.



Cereal Department ?

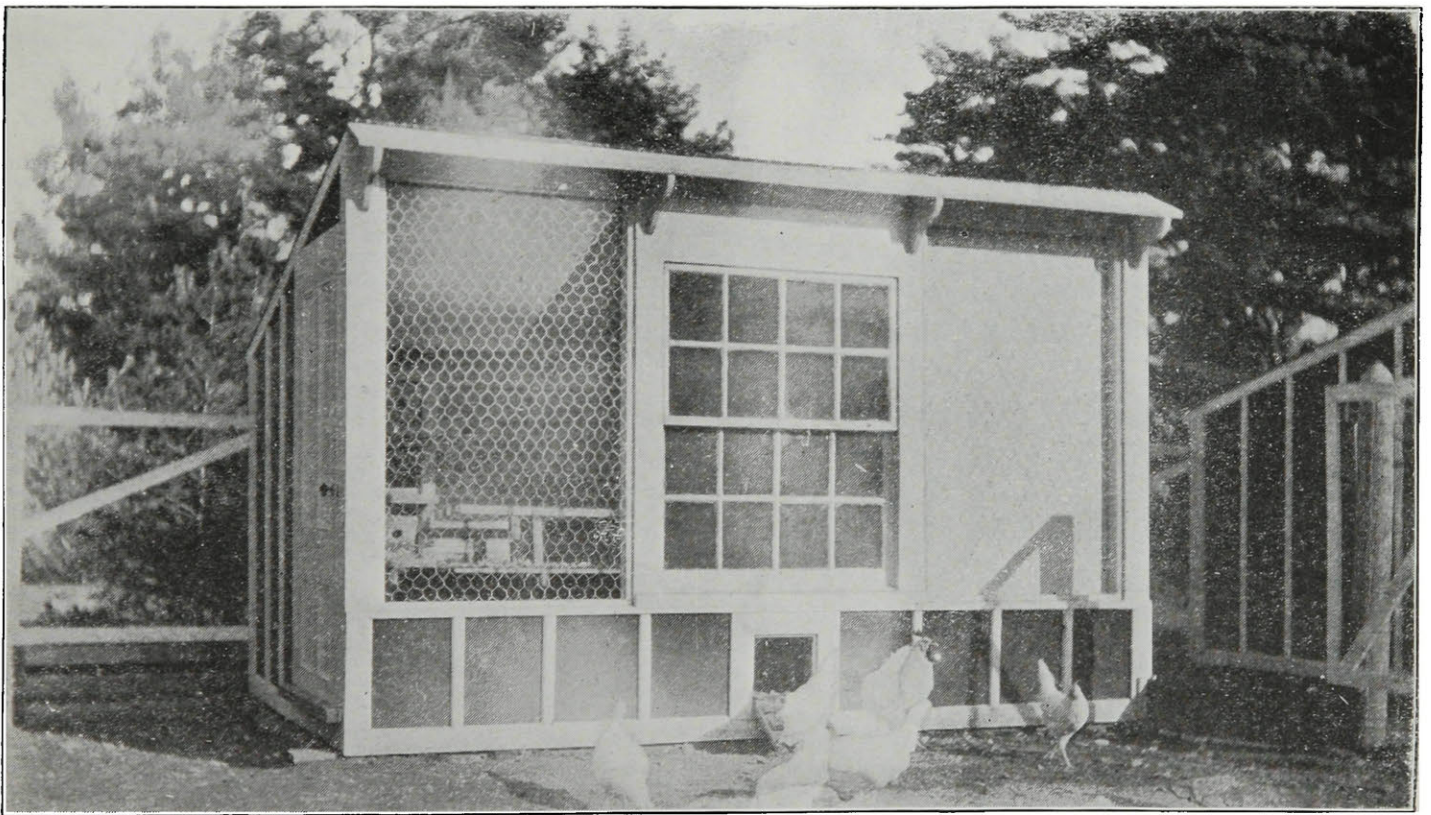
Preparing the Flock for Winter.



IN this short article it is the intention of the writer to deal with the preparation for winter of a small flock, as kept on the average farm, rather than on an extensive poultry plant.

The first question to be considered in preparing for winter is the housing of the flock. The number of birds to be

drained land where the soil is fairly sandy; all openings should be in the front side of the houses, thus avoiding all draught; they should be well lighted and well ventilated. Fowls do not mind a reasonable amount of cold if the air is dry and free from draughts. Factory cotton makes a very good ventilator for poultry houses. Either special openings may be made or part of the glass removed



A Good Winter House.

kept will regulate the size of the house. If old houses are to be used they should be thoroughly cleaned and sprayed with a reliable disinfectant. Possibly some alterations would be beneficial in regard to the construction of the houses. Whenever possible the following suggestions should be carried out, whether in the case of building or altering the poultry house:—Poultry houses should face the south; they should be built on well

from the windows and replaced by cotton. The accompanying illustration is of an 8 ft. x 12 ft. open (cotton) front house used at the Dominion Experimental Station, Kentville, Nova Scotia. This house gave very good satisfaction as a winter-house and was remarkably free from dampness.

It is not necessary to have the houses constructed elaborately so long as they are free from dampness and draughts,

supply plenty of fresh air and sunlight and are convenient to work in.

With regard to the poultry, those birds which are to be wintered should be in their winter quarters now. By this it is not meant that they should be confined to the houses. Nothing will hinder the progress, as far as laying is concerned, quicker than shifting the hens from place to place. If the birds have not been selected, they should be at once. Those which are known to be good layers, either by record of trap-nest or by observation, should be retained. In selecting pure-bred stock it is advisable for the beginner to use the Standard of Perfection or get some good poultryman to cull out his stock. Any that are not to be wintered should be separated, so as to give the rest a good chance. In selecting birds, although the above two points must be looked after, they should not cover any deficiency in health. Hens cannot be expected to lay well, put on flesh or produce strong vigorous chickens, if they are not in the pink of condition.

If you are buying stock, make up your mind as to what breed you are to keep and then stick to it. If a flock is to be kept for eggs only, select a breed such as

the Leghorn, Minorca, Andalusian, etc.; on the other hand, if a general purpose breed is wanted, one such as the Plymouth Rock, Wyandotte, Rhode Island Red, etc., should prove satisfactory. There are, of course, good, bad and indifferent specimens in every breed, and in selecting care should be taken to select from a good strain.

Judgment must be used with regard to the feeding and general care of the flock at this time. Do not make sudden changes in the rations, but work gradually from one system to another. Variety in feeding is a great factor, but sudden changes in food or even in the method of feeding should be avoided. The fowls should be getting the food which they are to have during the winter, with the exception of green food which they should be getting from the fields. Give them all their whole grain in a deep litter and make them earn their living. Be sure that your fowls are comfortable at night, do not let them catch cold. They do not necessarily need to be kept too warm, but by using judgment they may be gradually hardened, so that when Jack Frost comes they will be able to meet him in strong condition. BOULDEN, Agr., 16.

TIME AND TOIL.

Leave not the business of to-day to be done to-morrow : for who knoweth what may be thy condition to-morrow ? The rose-garden, which is to-day full of flowers, to-morrow, when thou wouldst pluck a rose, may not afford thee even one.—*Firdawsi*.

MACDONALD COLLEGE EXTENSION WORK FOR RURAL SCHOOLS

EDITORIAL.



IN this number of Macdonald College Magazine there is a new departure to be heralded, for an opportunity has now been given to the staff of the School for Teachers to convey their ideas directly to the teachers in the Province by means of this section in the Magazine. Henceforth, about ten pages will be reserved for staff articles, and the College is making provision for sending a copy of each number of the Magazine to every school and teacher in the Province.

This new adventure is designed to keep the teaching profession in touch with the training school and to enable the members of the training staff to send professional messages to teachers.

We trust that this new enterprise will add to the value of the Magazine and increase the good work it has already performed in the interests of the students and the general public.

An interesting feature of the attendance in the School for Teachers this year is the presence of no fewer than seven Agricultural students who are taking the special course for a Model Diploma.

Another feature is the fact that there are no fewer than one hundred and

twenty-six students at present in the Model Class. This is the largest Model Class that has ever studied at Macdonald College.

An unusual number of men students has also registered this session, of whom six are in the Model Class and two in the Elementary Class. The total number of students registered this year is one hundred and seventy-six.

INCREASE OF BURSARY.

A very important step for increasing the number of trained teachers in the Province has been taken by the Protestant Committee of the Council of Public Instruction by increasing the bursary from seventy-five to one hundred dollars. This bursary is paid to all students entering the School for Teachers at Macdonald College who sign an agreement to teach for three years in a rural elementary school. It is thus made easier for country students to take a full year's training in the School for Teachers. The bursary of one hundred dollars amounts to about two-thirds of the total expense. This generous action of the Protestant Committee does good in two ways. In the first place it renders it more possible for country students to take a full year's training and make themselves efficient

teachers. In the second place it will have a tendency to encourage a larger number of students to attend the School for Teachers and thus provide more trained teachers for the rural schools, which require trained teachers more than any other type of school if their work is to be efficient.

SCHOOLS AND THE WAR.

For the last two months the war has dominated everything and schools feel the effect in numerous ways. Much school furniture and equipment comes from Europe. Water colours, artists' supplies and pencils come from Germany and many books come from Great Britain, but in spite of the war the school work can proceed with little disturbance.

There are, however, several aspects from which our schools should view this war:

1. It is an excellent encouragement for the teaching of geography.
2. Schools should give all pupils an account of the origin of the war and its causes.
3. Pupils must learn and teachers must teach the laws of evidence.

The first of these needs no comment, for everybody now knows the position of Liège, Namur, Belgrade and even Sarajevo. This wonderful interest in the war should be harnessed to pull the geography lessons along smoothly and rapidly.

The other two aspects of the war are bound up together. Even young children have access to daily papers and either read or hear the news. But the facts are bewildering and a clear head is needed to keep approximately to the truth. Weekly papers are safer than the dailies, because of the retro-

spect on the events of the week. The monthly magazines and quarterlies are best of all. Particular mention should be made of the British "White Paper" giving the essential bedrock of the facts. The Province of Ontario is to be commended for its excellent foresight and wisdom in issuing this "White Paper" free to every Ontario School. This step might well be followed in Quebec.

Again, there are always two sides to every question and we must learn to study both British and German versions of the causes and events of the war. We must distinguish between false and true news; between real convictions and artificially created opinions. We must listen to views that seem to us mistaken, and sift the true from the false. History should be and is viewed dispassionately. But this is a more momentous period of history than the world has ever experienced and it is difficult to consider the pros and cons calmly. Children must obtain such guidance and information that they will not be ignorant of the facts but learn the value of evidence and the balance of probability or truth.

In a mixed province like ours with immigrants from all Europe, we must have some sympathy for unfortunate Germans and Austrians living among us. There may be, and undoubtedly there are, spies, but we ought to be generous to non-combatants living among us who are Canadian in feeling.

We rest secure in the righteousness of our cause and are determined that there shall be only one issue.

SINCLAIR LAIRD.

SCHOOL TRUSTEES, TEACHERS AND
BAD FAITH.

On August 22nd, the secretary-treasurer of a School Board wrote to the College in great distress, as his school

was to open in a few days and he had no teacher for the school. He asked help, and the name of an unengaged experienced teacher with a diploma, who lived in the adjoining county, was sent to him. This young lady was, at the same time, advised of the prospect of an offer from this Board and expected it. She received a letter from the secretary offering her the position at \$40 per month, and answered immediately. On August 28th she received a letter from the secretary stating that the School Board had engaged another teacher without waiting for her reply.

No condemnation can be too strong for such a breach of faith, and the Board's action in the matter is utterly contemptible. There is a great scarcity of qualified teachers for the coast schools, and I am convinced that the manner in which School Boards appoint their teachers has a great deal to do with it.

Unfortunately, such dishonesty is not confined to trustees, for, on September 4th, I had a letter from a School Board "regarding a breach of faith on the part of a teacher" and asking help from the College to secure another teacher.

Such incidents are certainly too common on either side. A situation of that kind should never exist. An offer of a post is binding until it is refused or a reasonable time for reply has elapsed. Acceptance of a post is likewise binding though the actual contract is not signed.

What is the educational world coming to if both trustees and teachers regard honorable letters as "scraps of paper"?

Surely the fact that the letters are dated August and September of this year does not imply that the evil influence of German disregard of treaties is corrupting good manners and faith in the Province of Quebec!

SINCLAIR LAIRD.



Never More Needed than To-day.

Celebration of the Fiftieth Anniversary

OF THE

Provincial Association of Protestant Teachers

of Quebec.



CELEBRATIONS of various kinds take their coloring from the events transpiring at the time of the celebration. The Executive had planned a year ago to hold the Convention this year in the City of Quebec on October 8th, 9th and 10th. The place of meeting suggested the character of the programme. History should be the central thought, history at first hand. Various toward and untoward events shaped the details of the programme and gave an historical and military cast to the proceedings. The lurid and ominous clouds of the European war made a background of unparalleled horror, apprehension and grandeur. The year 1914 will be burned into the minds of all living peoples as the year of The War.

The historic city of Quebec was the stage across which the actors of 300 years of civilized history, subsequent to the founding of Quebec in 1608, 150 under French régime and 150 under English government passed in review. Names on monuments and streets, and documents mark the passage of time during the French occupation of Quebec. Because of the poor work of the contractors and government officials of that time not a stone remains to mark the French rule. Brick and mortar, stone and wood, like the great actors on the stage of history, have crumbled into dust. It is true that Anne Street brings to mind the Company of 100 Associates; Dufferin

Terrace the first Fort St. Louis, the Basilica calls up old Notre Dame de la Couvrance, the first three public buildings in Kebeck. Connected with the central date of the period and the dividing line of history, 1759, many names and places are to be found: Wolfe, Montcalm, Lévis, the Plains of Abraham, Orleans, Montmorency, Beauport, Wolfe's Cove, Cap Rouge and Sillery Point, the Cove Fields marking the first British fortifications; Montmorency, Laval, Kent House, the residence of Queen Victoria's father; Little Champlain Street where Montgomery fell, a soldier to whose memory Canadians will not permit a monument to be erected; the Avenue des Braves and many other names and places too numerous to mention keep alive the memory of three hundred years of important history.

Thursday afternoon was fine and was spent in an excursion to the Mecca of French Canadians, Ste. Anne de Beau-pré. For the twenty-one miles of the journey we had a guard of honor; on the right the Island of Orleans in the distance, in its gorgeous robes of Autumn coloring, with the river between; on the left, near at hand, a perfect riot of color in the maples, birches, aspens and evergreens; while in the distance, against the sky line, the foothills of the Laurentians appeared like glowing forest fires.

To every child of Quebec belongs by right of birth the opportunity of studying Canadian history in the highly satisfactory way indicated by Dr. Colby in

his address on "The Teaching of History." A thorough knowledge of some one period, actual sites, maps of sites, large units of time, 300 years or 370, if we care to go back to Jacques Cartier's first visit, divided into smaller units, original documents, descriptive narrative, accuracy of fact, were salient features of the lecture.

The Quebec Boy Scout Association kept up the military spirit at the celebration by flitting, in khaki dress, across the stage in all directions, courteously offering their services to the members of Convention as guides, messengers and burden bearers. The teachers, undaunted by torrents of rain and abundant mud, with garments adroop like rained on fowls, and wet to the skin, set a splendid example to their guides, the boy scouts and other children of Quebec, of dogged determination to gain useful information in the face of fearful odds. The example was so good that never again could the school children of Quebec exemplify "the infinite capacity of the human brain to withstand the introduction of knowledge."

Dr. Peterson's eloquent address on "The Origin of The War" was an excellent resumé of the events leading up to the present European struggle for existence, and was listened to eagerly by a large audience.

The President of the Association, Mr. C. M. McBurney, B.A., stated that Dr. Peterson had taken one half of his address and Dr. Colby the other half, but showed the futility of the old Roman saw "ex nihilo nihil fit" by making a very gracious and eloquent address with the remainder, in which he reviewed briefly the history of the Association, paying a glowing tribute to Dr. Robins, late Principal of the McGill Normal School, whose life and work are in the warp and woof of the Association's fifty years of life.

Some of the teachers were disappointed, at first, by the meagre programme provided by the Executive, but they soon entered into the spirit of the promoters, history, celebration, war, and received much good from the visit to Quebec.

Dr. G. W. Parmelee, English Secretary of the Department of Public Instruction, and author-in-collaboration with Dr. A. G. Doughty, C. M. G., of "The Siege of Quebec," closed the programme on Saturday morning with a splendid address on the subject of his valuable contribution to historical literature.

Where were the teachers trained at Macdonald College? They were not sufficiently well represented at the Convention. It must be borne in mind that the men and women who have been eminently successful in the work of teaching in this Province have lined up in the Teachers' Association with other educationists in a strong, vigorous, forward battle line, ready for both offensive and defensive war against ignorance.

The advantages to the young teachers, as well as to the older ones, of joining teachers' institutes and conventions are many. The inspiration and enthusiasm which come from contact with others engaged in similar work to our own, and from specialists in their own lines, the mental rub up with men of affairs like Sir Lomer Gouin, the Premier of the Province; Sir Francis Langelier, Lieutenant-Governor of the Province; Lt.-Col. Roy and Lt.-Col. Wood, who all addressed the Convention at some session, cannot be too highly valued.

The Teachers' Association stands on guard for your interests whether you sleep or wake. Your pension is safeguarded by it, an investment which the young teacher is inclined to belittle. The Association brings a heavy weight of public opinion to bear upon your grievances, be they the lowering of the stand-

ards of your diploma or the arbitrary conduct of those to whom you bear an official relationship. It is in the Teachers' Association that you may discuss and legislate for improvements in the courses of study and in the text-books, and may get help in solving the rural or urban problems which confront all teachers.

Surely the students who leave Macdonald College after a year or two spent in browsing in the fine library of that institution must feel the need of good books and magazines to supplement their school texts, and furnish them with reading matter for the long winter evenings. The Teachers' Association comes to your help. It has a loan library for teachers. For a list of the books and the rules governing it write to Mr. Watson Bain, M.A., the Montreal High School. It has club rate arrangements for the best educational magazines. For lists of

magazines and club rates write to Miss I. Grant, Westmount School Board.

McGill University, also, has a travelling library for teachers. Mr. Gould, Librarian of McGill University, would give information to teachers in reference to this library.

Why do so few teachers attend the Convention? On my return from Quebec I met a rural school teacher who said: "Did you go to the Convention at Quebec?" On my answering in the affirmative she replied, "I wish that I had known you were going I would have asked you to take me. I was afraid to reach Quebec by myself at ten o'clock at night." Come to the next Convention to be held at Westmount, and if you write to us for aid we shall be pleased to provide a chaperon committee for which I hereby pledge one member.

Union is strength. L. B. ROBINS.



Who is the Happier?

Music in the Curriculum.

"I am fully satisfied in my judgment, nor am I ashamed to own it, that, divinity excepted, there is no science which can match music. The young should be habituated to this art, for it refines and makes expert."—(*Luther.*)



These materialistic times the school curriculum is in danger of being formulated upon utilitarian principles, which are apt to allow an immediate and temporary advantage to blind its critics to greater, wider and more permanent good. This is perhaps one of many reasons which accounts for the meagre place which music occupies in our provincial schools. It is the purpose of this paper to enumerate some of the benefits, physical, intellectual and emotional, which justify its inclusion in a properly organised system of education.

In a discussion upon music in our public schools it would be obviously "beside the mark" to treat of the advantages of individual instrumental instruction; and we must restrict our consideration to the benefits to be derived from teaching elementary vocal music in class.

I.—PHYSICAL.

Good breathing is essential to good singing. It is impossible to produce a pleasant, natural tone without right habits of breathing, adequate lung capacity, and the exercise of the will in the muscular control of the breath.

In addition to the immediate benefit to the child's voice from the practice of singing,—improvement of tone, extension of compass, increase of volume,—correct vocal exercise in childhood has a distinctly beneficial effect upon the adult voice.

The influence of singing upon speech is important. It improves the speaking voice. The prolongation of vowels, the analysis of diphthongs, the sharp attack of consonants necessary in singing have a direct bearing upon pronunciation and articulation in speech. It is a powerful aid in the cure of stammering. It increases the range of inflexion in reading and writing (one of the sure signs of an active intelligence). It also gives greater control of the means of vocal expression.

Another benefit from the practice of singing is that it exercises the faculty of hearing, quickening and rendering it more discriminative.

The physical act of singing, stimulating as it does the respiratory, nervous, muscular, and (to a less extent) the circulatory and digestive processes, increases the vitality, if the exercise is directed with discretion.

II.—INTELLECTUAL.

So much has been written about music as a recreative agent that its value as an intellectual exercise is apt to be underrated. Yet as a mere *study*, and apart from relaxation, its claims are considerable. These claims are evident as regards the higher branches of musical theory, counterpoint, composition, orchestration, and so forth, which are outside the scope of school music; but the mental appeal of practical class-singing, though properly subservient to its school purpose of relaxation, is both powerful and unique. Having, as its

chief material, fleeting aural impressions, there is no subject which calls for greater alertness of attention, fineness of discrimination, and promptness of response. This is especially true of teaching reading music at sight.

Even in teaching songs by imitation, "singing by rote," the best methods of securing the interest of a class are founded upon more or less obvious appeals to the intelligence and musical taste of the pupils. Such essentials as sense of rhythm, beauty of tone, perfect intonation, phrasing, diction, expression, can be properly secured only by awakening the intelligence of the singers. From this beginning it is natural to proceed to higher points of musical appreciation, such as appropriate tone-colour, sentiment or "mood," appositeness of words and setting, characteristics or history of folk-songs, analysis of construction, and other aesthetic contents of the songs being practised.

The chief difficulties of teaching sight reading lie in the domain of Pitch: to recognise and reproduce readily and accurately from written signs a melodic succession of tones; to cultivate a definite sense of tonality; to relegate any given tone to its own place in the scale-system; to estimate correctly and quickly melodic intervals, consonant or dissonant; to maintain an independent voice-part—these and similar problems are not to be despised as forms of brain-training.

Analogous mental exercise is afforded by the study of Rhythm; from the elementary notions of regularity, pace, accent; continued by the study of sustained tones, rests, subdivisions of beat, syncopation, varieties of time (duple, triple; simple, compound); until the more subtle aesthetic uses of rhythmic devices are gradually unfolded in polyphonic and cyclical art-forms.

If the elements of Pitch and Rhythm separately afford so much intellectual exercise, their combination will plainly demand more complex thinking, which is quite unique in its variety, character and activity.

The possessor of a well-trained ear has a piece of mental equipment which is of practical utility in the ordinary affairs of life, wherever audible things are concerned, — in determining the pitch, character, duration, volume and intensity of all sounds; in some scientific investigations; in discriminating niceties of pronunciation in the study of his own or of foreign languages; in readiness of apprehending the matter, meaning and character of speakers from their vocal intonation; and in multitudinous ways.

The skill required in singing, especially in sight-singing, is unlike any other. In drawing, painting, modelling, or manual training, the visual and tactual percepts are of material assistance. In vocal practice the effort is more intimately mental. The will acts in response to a mental stimulus, and the correction of a misdirection of volition is dependent solely upon the judgment of the ear: the eye does not help, as is the case in most exercises for the acquirement of skill.

Another valuable benefit of musical training lies in the stimulus it affords to the imagination and inventiveness of the pupil. The material of music, reduced to its elements, is exceedingly simple,—seven tones (plus their chromatic variants), long or short, loud or soft: that is all! Yet, out of this unpromising material such a bewildering profusion of tonal effects are possible that the development is inexhaustible. Ways of using this phase of music in teaching will afford pleasurable exercise for teacher and pupils alike.

Music is not confined to one nation, language, or period. The study of songs of various periods and many nationalities affords new and widening interest, especially to the teaching of history and geography.

The sharpening of the general faculties by a training in sight-reading has already been alluded to. Its truth has never been controverted wherever it has been given a fair trial. The probable reason for its influence upon the mind as a whole lies in the fact that the coordination of eye, brain, ear and voice needful in acquiring skill in singing music at sight requires a concentrated, alert attitude of mind, which becomes more or less a habit adopted by the pupil towards his studies in general.

III.—EMOTIONAL.

Music is so commonly called "the language of the emotions" that to argue on emotional grounds for its inclusion in the curriculum seems like an attempt to prove the world round, so that but few words will suffice.

The child's natural delight in mere sounds and in rhythmic movements are factors which the educationist uses as a basis of operations. From these physical joys it is an easy task to lead the child to find corresponding pleasures in a simple artistic use of vocal tones, and in the mental appreciation of elementary rhythmic devices. Cultivated with skill from these natural proclivities, the pleasure increases with power. Nor does this pleasure end with childhood,—perhaps not with life itself, if there be truth in the Apocalypse!

The consciousness of power in production—even in the ability to reproduce a simple song—is an incentive to further effort, no less applicable to music than to other subjects; and the pleasure can be repeated, without preparation or expense, in the home.

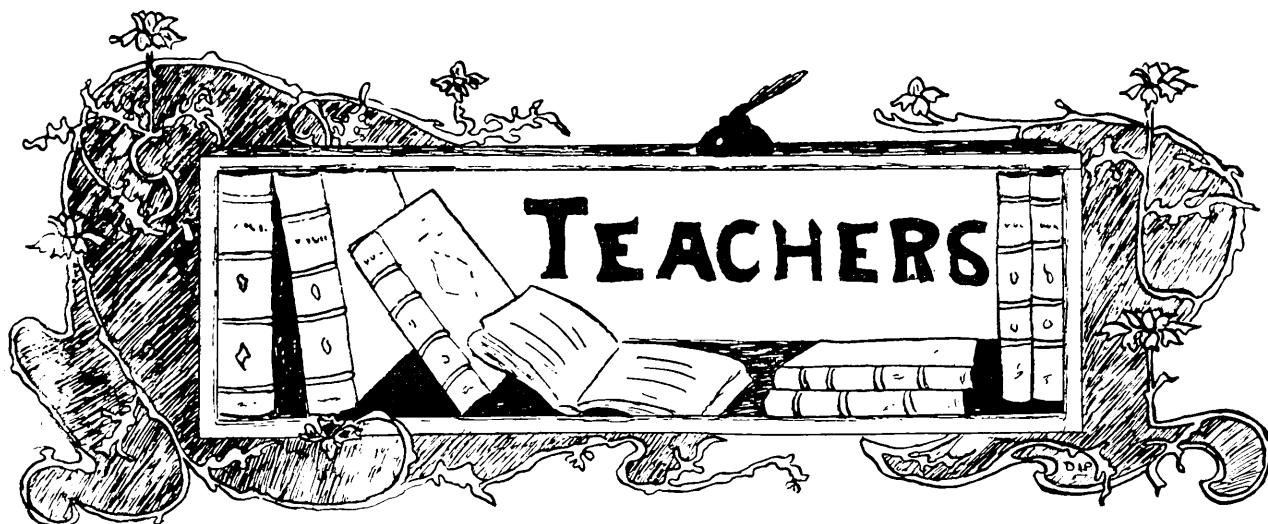
As a means of developing the child's power of self-expression and of self-control; as a field for the play of imagination, sentiment and ideality; as a discipline in self-abnegation (the voice of the individual being merged in the general tone of the class); as a welcome relief from the continuous use of the hands, singing has peculiar educational value.

But the highest use of music in school lies in its power to awaken the artistic taste. It deepens and ennobles the emotional nature and refines the manners, because the intelligent expression of ennobling or refined sentiments leaves a similar impression upon character.

From the standpoint of school organisation the advantages of class-singing as a subject are many: expensive or bulky apparatus is not necessary,—an instrument is sometimes a distinct hindrance:—it needs no time in class preparation, or disturbance of the classroom; it brightens the routine; it can be used in short periods, in conjunction with other subjects, or between other lessons; finally, it is extremely good for the teacher, for, although it requires little special skill, it is noteworthy that a teacher who can give a really good class-singing lesson can handle practically any other subject with success.

G. A. STANTON.

To-day is thine to spend, but not to-morrow ;
 Counting on morrows breedeth bankrupt sorrow ;
 O, squander not this breath that heaven hath lent ;
 Make not too sure another breath to borrow.—*Omar Khayyam.*



The Agricultural Model Teachers' Course.

TO those who have not heard of the new course in the School for Teachers the above headline will, no doubt, seem formidable and confusing. Before we enter into any account of the course an explanation of how it came to be and its purposes will, therefore, not be out of place.

For the past two years a movement has been on foot to give the Agricultural students, of a matriculation standing, an opportunity to obtain a certificate to teach. For various reasons, those who championed the cause met with some opposition, and for a time it was felt that no good could come of their exertions. However, after many discouragements, at the spring meeting of the Protestant Committee of this Province, a resolution was passed which made it possible for a student in any of the first three years of Agriculture to obtain the regular Model Diploma Certificate by spending in the School for Teachers periods of time varying according to the seniority of the students. Those who might enter from the present Junior

year were required to put in two Septembers (1914 and 1915) ; those of the Sophomore year, two Septembers, and the months of May and June at the end of their Sophomore year ; while those belonging to the present Freshman year were required to spend two Septembers, two spring terms similar to the Sophomore one, and three periods (hours) per week throughout the Freshman year.

The purpose, or rather the purposes, for which the course was made possible may be called threefold. *Firstly*, to enable those students entering college to reimburse themselves at the end of their second year exactly in the same manner as students in Arts may obtain a second class Academy diploma at the end of the second year in Arts ; *Secondly*, to relieve somewhat the tension felt throughout the province because of the scarcity of teachers, particularly men ; *thirdly*, to make it possible for graduates, especially those in demonstration work, to take classes in Agriculture throughout the province in a capable and masterful way.

Because they did not know of the course, or did not realize its value, no students were forthcoming from the Freshman year. From the other two years seven teachers appeared on September 3rd, ready and willing to undergo or enjoy whatever the authorities deemed necessary.

We entered the course with a great confliction of feelings, uppermost of which was an utter lack of knowledge of what we might have to do before we could claim our certificates. We all remember yet the dread we had of our first lesson in practice teaching and in music, but now we look back on them with pleasure. Several very amusing incidents happened during the course, but to relate them would be to disclose trade secrets, for we were in a class by ourselves. All instructors were very kind, and one and all went out of their way to assist us. Emphatically we experienced the exception to the old rule, *Familiarity breeds contempt*, for as the days rolled by our respect for the staff increased in bounds; our self-respect in the teaching art as rapidly decreased.

To ease the minds of those whose misfortune it is to look on the dark side of things, a brief summary of our work will suffice to show that our respect was

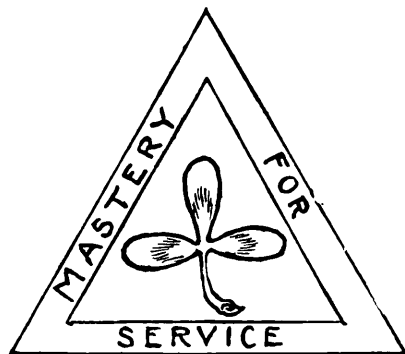
not born because of any leniency on the part of the staff. In the whole of our time we had one free period and we soon learned to value it highly. Twice a week we were required to spend the afternoons at practice teaching, and for the first week we thought, talked and dreamt of nothing but Lesson Plans. Two other afternoons we had laboratory periods in drawing and the rest of our time was filled with lectures in the method of teaching in English, French, Music, Physical Training, etc. In addition, every lecture was very concise. Three times per week we had the pleasure of a treatise on Education from Prof. Laird, and it was with extreme regret that we heard the last of his advices.

Although we had tried our best to absorb all that was given during the month, yet at the end we had only begun to realize what a complex matter really good teaching is, and if at times we could not keep back the feeling that instruction in some of the more elementary forms was nonsense we really knew that the fault lay with us. It is to be hoped that next year's Freshman class will avail themselves of such an opportunity of procuring what could be well called a sure means of livelihood.


J. H. McOUAT, Agr., '16.

Avis Public.

Public Notice is hereby given that at the next meeting of the students in the Assembly Hall, a receptacle will be provided into which may be put buttons, keys, small change, and other articles of infantile delight. This is not to aid the Salvation Army, but to provide an opportunity for those really interested to *hear* what the speakers have to say.



Mastery for Service.

“ASTERY for Service” is the motto chosen for Macdonald College, one of the foremost Agricultural Colleges in the Dominion.

The motto is appropriate, for if any one vocation combines in itself all that is best in both mastery and service, that vocation is the farmer's.

Perhaps in no other realm of life is service so indispensable for mastery. Students of scientific agriculture have given years of service to gain mastery of the soil, and they have succeeded in growing more and better crops on the land. It is they who must teach agriculturists to make supply exceed demand, even under the existing conditions in many countries, of ever increasing city space and a consequent decreasing area of farm lands. In these days, people living in the temperate zones do not, as a rule, give much thought to the sources of food supply. They never suffer severely in times of drought, as their ancestors did, firstly because agriculturists have done much by irrigation and other means to overcome a dry season; secondly, because food is stored away for future use for a long time ahead.

In war, especially in a long drawn-out war, the question of food is a serious one,

and frequently decides the result. It has been said that the Battle of Waterloo was won on the playing fields of Eton. So it is true that the battle which must be waged at the close of a war, is even now being won in the colleges of scientific agriculture. When this present terrible war is ended, it will be for the servants and masters of agriculture to labor long and willingly for their cause. It will be only by the wealth of the soil that devastated cities and ruined towns will in time be restored to something of their former prosperity. Service will bring mastery.

In this requirement of service, agriculture ranks with the Fine Arts. In the Fine Arts we are apt to believe that mastery is innate. Latent genius may be there, but it requires years of patient study to develop it to its highest form. Musicians, sculptors and artists, especially, must work very hard if they wish to succeed. Authors, though, do not have to serve an apprenticeship in writing. Every experience is an education to them, for they are gifted with the “seeing eye.” Those authors or poets, however, who have besides talent, “an infinite capacity for taking pains,” generally produce work of a higher literary order. Tennyson was never content with his poems as first written. He

always reviewed them carefully, polishing them and adding to their beauty. In music, moreover, there can be no mastery without a great deal of service, and in that art, more than any other, talent needs much study and work before it becomes genius. If you read the lines of Mozart, Mendelssohn, or any of the great composers, or the memoirs of some of our greatest singers, you will see that they worked very hard in their youth and worked even after they were famous.

In science there can be no reward of mastery before services have been rendered. Darwin worked and studied all his lifetime, even through ill-health. Edison, we are told, never ceases work. All the great scientific discoveries, electrical, mechanical or medical, are the results of years of service. Often one man has begun where another has left off, and so has seemed to accomplish miracles, but those who look deeper always find that there are years of toil behind any great scientific discovery.

Thus we see our motto, "Mastery for Service," is an appropriate one for the other two schools of Macdonald College, also. In teaching, to master one's self for the service of others is absolutely necessary to success. In Household Science there is a great deal of service to be undergone before mastery is attained, and Household Science is a science in the full sense of the word. So on the triangle of green and gold, which is our emblem and which represents the three schools, we have engraved "Mastery for Service," a splendid motto indeed to live up to, and if we live up to it faithfully—

"It may be we shall touch the Happy Isles,
It may be that the gulfs will wash us down ;
But something ere the end,
Some work of noble note, may yet be done."

REBECCA ECHENBERG, T. '15.



From Producer to Consumer.

The Initiation of the Teachers.

First Version.



THE initiation of the Model and Elementary Teachers took place on Saturday evening, Sept. 5. In the afternoon a notice was put up on the bulletin board announcing a meeting of the Literary Society in the Gymnasium at 7 p.m. There were some suspicions as to the character of the meeting, but everyone was present when Professor Laird came in at the appointed time and took his place on the platform, where a table and three chairs had been placed. It was then noticed that the Seniors had mysteriously vanished.

In his opening remarks Professor Laird said that he had been asked to make an address, but was not quite sure on what subject to speak. At this remark there was a general burst of laughter; and everyone knew that something out of the ordinary was about to happen. However, he began to speak about the present war and the misery and suffering entailed by it. Just as everyone was intent on his words a frightful shrieking and moaning arose. All eyes were at once turned toward the Gym gallery, whence the weird sounds proceeded. A ghostly procession, led by three figures clothed in black college gowns and caps and carrying in their hands rolls of parchment, was gliding across the gallery and down the stairs. The whole company wended their way to the front, and the leaders took their places on the platform, while the ghosts

arranged themselves about it. Two vessels containing salt water were placed on either side of the platform, and a ghost holding a towel stood by each one.

One of the black-garbed spectres then demanded silence, but the command was treated with derision by the Freshies. However, after a time some measure of quiet was obtained, and the spectres proceeded to read the laws of the Seniors. According to these laws a Freshie must prostrate herself on meeting a Senior and remain so until bidden to rise; and she must open all doors and allow her Seniors to pass through before herself. A word of advice was then given to these greenest of green Freshies that they might avoid mistakes. When the dinner-bell rang they were not to make a frantic rush into the hall thinking that a stray cow was roaming about; they were not to make a dash for their rooms to study whenever a bell rang at night, as it would probably be the telephone bell; they were not to hurry to the dining-room at meal time, as the food would not run away; and above all they were not to fuss with the Aggies.

When this part of the ceremony was completed the mournful music of the Dead March wailed through the room and the ghosts began wandering about selecting their victims, whom they led to the platform and forced to undergo the process of having their hands washed and wiped. If any resistance were offered their faces were washed also. They were next compelled to sign their

names with a quill pen in the book of the Seniors. Some refused and force had to be applied before their signatures were affixed. Each one was then sent to her fate. She was led out to a dark place and bidden kneel to a ghost, who told her to repeat the College motto. She was then taken down some steps, where she knelt and kissed the soapy fingers of another ghost. She was led on a little further and told to kneel and open her mouth, when a dose of paste was given her. Then she went on down a winding stairway and received a mouthful of salt. Still she was taken on down, down, down, when she was suddenly seized and blindfolded and taken to a room where the sound of running water was heard. Someone led her up a spring-board and asked her if she could swim. Whether she could or not made no difference, as she was forced to jump, and landed on the floor instead of in the tank, as she had expected to do. After these

proceedings she was led away, and something was thrust into her hand with the words, "Favour for a Freshie." It proved to be a little yellow silk bag filled with salt. Then she was conducted along a passage and up a winding staircase, where the bandage was removed, and she found herself at the reception-room door. She went in and joined the other Freshies, who were busily removing the paste from their faces.

After everyone had been thus initiated into the mysteries of the Seniors all were taken back to the Gym, where those who had in any way caused inconvenience to their Seniors by refusing to obey them, had to pay the penalties. Then the Seniors served ice-cream. When all had finished they gave their yells and sang the College songs and the National Anthem, in which all joined. The Freshies then retired, leaving the Seniors washing dishes.

E S., T., '15.



THE EDITOR CORN-ERED.

The understrappers of the Magazine Board have spent many sleepless nights devising some means of hoodwinking the eagle eye of the Editor.
We express our acknowledgments to the Printer's Devil.

The Teachers' Initiation.

Second Version.



THE funny thing about it was that we thought the initiation was going to take place the night before it really did. Rumours had been flying round all evening, and as it grew later, we grew more and more excited. At last, about a dozen of us decided to congregate in Doris' room. We all put on our gym. suits so as to be ready if we were dragged from the room.

At half-past ten we put out the light and lay laughing—about six of us piled on each bed—when we heard a stealthy tread coming along the corridor. The door was cautiously opened and we waited, breathless, for the command: "Rise and follow me." But it didn't come. Instead, a voice said: "Does anyone know where we can get some water? We're dying of thirst!" We all burst out laughing, but none of us would volunteer to aid the search-party, and we succeeded in communicating our fears to the new-comers to such an extent that they joined our little band.

Eleven o'clock came and passed, and still no sign of the seniors. Again we heard a stealthy tread! Again we waited in breathless silence! This time it was the night watchman with his lantern.

At last we determined to break up the happy party. Three or four of us had to go up to the next flat, and we screwed up our courage and prepared to depart.

But just as we were creeping upstairs we met—the villain in the play, otherwise known as the night-watchman! We turned and fled incontinent, or, in the words of the immortal Julius—"Praecipites nos fugae mandavimus."

I was afraid to sleep alone, and so were Lois and Jeanne, so Ethel invited us to spend the night with her. O, what a night! Lois and I slept together, or, rather, we tried to sleep, but in vain. In the middle of the night we were startled out of our seven senses by a most alarming banging on the door (it turned out to be the explosion at Coteau), and we lay shaking and giggling until we woke the others up. At last, towards morning, we fell asleep. But, as Lois would say, it was a "ghastly" night.

After such an experience the real initiation came as an anti-climax. Before tea, a notice was posted that there would be a lecture in the Gym. at 7.15, and all must attend. Of course we knew what was coming.

When we were all gathered together, the Dean came in and began to talk to us about the war, but he had hardly got well started when all the lights but one went out, and an unearthly shrieking and groaning began. Then someone began to play the Dead March and in walked a strange procession.

Twenty-four ghosts appeared and at their head came three, attired in the robes of justice and having in their hands large parchments.

After these three came four ghosts, bearing ewers of water and towels of fine linen—at least it is better to say so.

When the three judges had ascended the platform, the ghosts grouped themselves near and called for silence. After a short interval of pandemonium, a period of comparative quiet ensued, and the first of the three read us a proclamation. Then followed the second with a list of "Don'ts" for Freshies, and lastly the third unrolled a long parchment, whereupon we were to inscribe our names.

Then came the trial! One by one we were dragged up to the platform, our hands washed—and in some cases our faces, too—and we were made to kneel and sign our names on the scroll.

My turn came towards the last, and as I was very meek I was let off easily. Then a very gentle, well-mannered ghost led me off to the head of the circular stairs leading from the Gym. to the swimming tank. There I was told to kneel and repeat the college motto to the senior stationed there. She motioned me on to the next, a few steps down, who made me kiss her hand. After that I was given a dose of paste and one of

salt. By that time I had reached the bottom of the stairs, where I was blindfolded, and pushed into the swimming room. There I was asked if I could swim, and upon replying in the negative I was told there was no time like the present, and made to walk up a board and jump off—not into the tank.

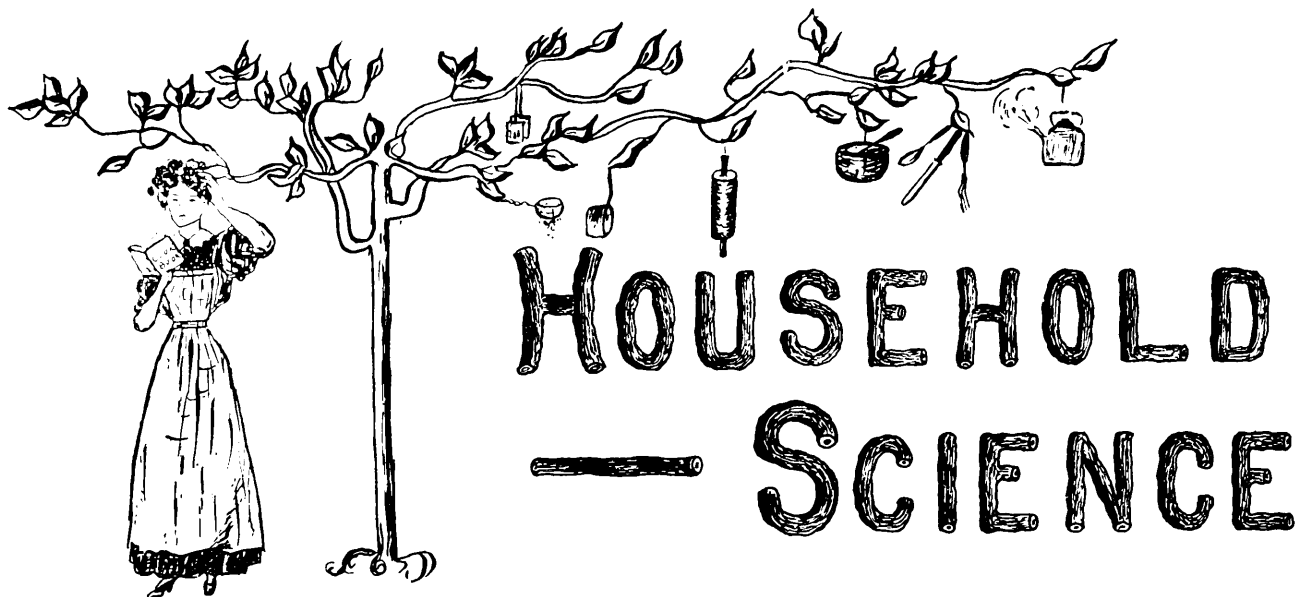
I was then taken upstairs to the reception room, where I found many other girls in various stages of nervous collapse. Some of them had paste down their necks and in their hair, but all held in their hands a tiny yellow bag, tied with green ribbon—a favour from a Senior—which I had not received. I felt very much neglected, but next day I gathered up a dozen bags from the basement floor.

"Last stage of all, that ends this strange, eventful history"—we were all taken upstairs to the Gym. again, and regaled with ice-cream and the stunts of those who had been "very fresh." There is still one doubt in my mind and one question I would like to ask. The ice-cream was *slightly* sour—was that part of the Initiation?

E. M. B., T., '15.



The Simple Joys of Childhood.



Our Initiation.



T was the evening of the fourteenth. Despite our natural viridity (found so refreshing by our worthy seniors), many of us during the day has entertained certain dire premonitions about what might happen that night. Down in the dining-room, however, under the warming influence of tea, all these had been forgotten, and the clatter of many voices filled the air, or rather I mean a soft murmur from voices well modulated might have been heard around each table.

Suddenly this was interrupted, and we found ourselves in semi darkness. Ghostly figures, voluminously shrouded in sheets, stalked down the dining-room, bearing to all in the Junior Science the summons to appear that night in the lower hall. Filing out of the room we were met by the dismal clanging of a bell and stern voices bade us make haste to our rooms.

An hour later a group of scantily clad figures might have been seen huddled together in the alcove outside the dining

room. After remaining thus for some time, during which the temperature seemed suddenly to have dropped to zero, a door was opened, and one by one, as our names were read out, we heroically screwed up our courage and entered. Our eyes were forthwith tightly bandaged, and sitting on a board we slid down into a subterranean region. Here the sound of splashing water, accompanied by loud wails and shrieks, smote our ears. A stern voice demanded: "Can you swim?" Whether we bravely answered yes or earnestly vowed we couldn't we were all alike bidden to jump—and doing so reached in safety terra firma, six inches below.

Then were we led over a rough perilous road to where the President stood in state, and on bended knee we gave our oath of fealty and allegiance. Thereupon a portion of a certain ingredient, considered by our worthy seniors to be most beneficial to us in our present condition (sodium chloride I think they call it in "Nutrition"), was duly administered to each of us, and we were led off up to the gymnasium.

Here a very delightful hour was spent, the seniors very kindly providing the refreshments, while the Freshies furnished the entertainment. Cheerfully we displayed our talents, whether vocal, elocutionary or gymnastic, talents which through modesty we had, up to

efforts of the Freshies seemed to be greatly appreciated.

Refreshments followed. Then, oh, how proud and thankful we were that we belonged to that most noble institution, the School of Household Science!—for the “eats” prepared by



Kneel and kiss the hand of a senior! (covered with soap)

now, refrained from bringing before the public eye, and many lights hitherto hidden beneath their bushels appeared in their full brilliancy. One of our members actually showed herself quite adept in pursuing an apple around the floor with her nose! On the whole the

our most esteemed seniors themselves were, of course, incomparable. Science yells, and then homeward we trooped, our spirits in no wise dampened or depressed by the evening's excitement.

A. C. R

The Short Course Organize.



MEETING of the Autumn Short Course Science girls was called on Monday, September the 28th, for the election of their officers.

The following were elected :—

President, Miss Edith Hunter.

Secretary, Miss Marjorie Blackader.

THE SHORT COURSE CLAN.

Here we stand a goodly show,
Fifteen maidens in a row,
With minds alert and faces bright,
All clad in gowns of green and white.
Marjorie Blackader, of the curly hair,
Always thinks twice of what she should wear,
But nevertheless she's our Secretary bright,
And can think and work with goodly might.

Nina Chambers, of stature small,
Comes mincingly along the hall,
And on her face does always play
A smile that's guaranteed to stay.

And who is this that doth dispose
A can of powder on her nose?
'Tis Marjorie Cook, but what a shame
She does not live up to her name.

Two bonnie lassies from a farm,
You always see them arm in arm,
Hazel Dixon and Marjorie Matcheth,
They're the girls can wield a hatchet.

With glossy braids and accents low
She's the one that's sure to go,
She hies from Westmount, that land of fame,

And Irene Hazeldon is her name.

And one there is of stature tall,
Head and shoulders above us all,
She is our leader renowned of fame,
And Edith Hunter is her name.

Who is this that's in a muss
From morn till night—and such a fuss?
Gwena Ibbotson, she's the one
That's always ready for the fun.

Vera Kirby is our saint,
She is a dear, but oh, so quaint,
And round her head a halo shines,
She never would be charged with fines.

There is one, but oh, alas,
They say she prinks before the glass,
But neat and trim she doth appear,
O, Eva Kingman, she's a dear.

Here is one of studious mind,
The like of her you cannot find,
Helena MacDonald knows all that's done,
And answers questions every one.

Who is this that is the bride,
Who from the town each day doth stride,
And in her cooking takes a pride?
—O, Mrs. Mitchell.

Edith Reynolds is our star,
You can hear her from afar,
On the fiddle she doth play,
And all who hear her come to stay.

O, here is one that is the sport,
She plays with zest upon the court,
She dives and swims and dances well,
O, Nora Sherwood, she's a swell.

And next to her amidst the clan
Is Isabel Williamson, she's the man
Who leads the yell,
And when we yell
We yell like——well.

So here you have them, one and all,
Dark and fair, short and tall,
A goodly crew from man to man,
Who call themselves "The Short Course Clan."

Faculty Items.

Editor—Dr. J. F. Snell



THE end of the academic year having been passed since the preceding issue of the Magazine, the number of changes in the personnel of the College Staff to be reported in the present issue is naturally a considerable one.

In the resignation of Prof. Klinck, who left at the beginning of August to take up the duties of his new position, that of Dean of the College of Agriculture in the University of British Columbia, the Faculty loses one of its ablest and most highly esteemed members, the student



Prof. L. S. Klinck.

body one of its most gifted teachers and most sympathetic friends, and the staff of the Macdonald College Magazine its first Faculty Representative. Prof. Klinck had devoted nine years of earnest and thorough work to the service of

Macdonald College and to the promotion of scientific agriculture in the Province of Quebec. He had built up a strong department—strong in research, strong in instruction and strong in the extension of knowledge to the practical farmer. From every standpoint he will be greatly missed in the life and work of Macdonald College. Quebec may well congratulate British Columbia, and McGill its new-born sister university, on the acquisition of the services of such a leader in the field of agricultural education.

The Department of Cereal Husbandry is under charge of Mr. R. Summerby, B.S.A., pending the appointment of a successor to Prof. Klinck.

The Horticulture Department has also been deprived of the services of a highly-esteemed instructor by the resignation of Mr. F. M. Clement, B.S.A., who resigned in the early spring to accept the position of Superintendent of the Ontario Experimental Fruit Farm, at Vineland, Ontario.

Mr. A. H. McLennan, B.S.A. (O.A.C., 1908), has been appointed lecturer in Horticulture in succession to Mr. Clement. Before entering upon his course in Guelph, Mr. McLennan had had an experience of ten years in practical horticulture and since graduation he has been a member of the Department of Pomology in the Ontario Agricultural College. Accordingly, Macdonald College acquires in him an instructor of broad and varied experience.

Dr. J. J. Walker has severed his connection with the College and sold his practice in Ste. Anne de Bellevue to Dr. Kelso.

The new College Physician, R. B. Kelso, M.D., is a graduate of Queen's University and has served as intern in the Montreal Western and Montreal Maternity Hospitals. Dr. Kelso came originally from Dutton, Ont., which was also the home of our Mr. A. A. Macmillan.

The newly created position of Veterinarian has been filled by the appointment of Alfred Savage, B.S.A., D.V.M. Dr. Savage was a member of the original class of Macdonald College, that class whose slogan was:

“ We were the first,
We are the first,
The first we mean to be.”

—a prophecy which is fulfilled with respect to the position of Veterinarian. The three years intervening between his graduation and his return to Macdonald have been spent in the halls of Cornell University, to which institution he owes his new degree.

Miss Torrance is in Stockholm, Sweden, on leave of absence, taking a course in Physical Training.

Miss Dorothy Richmond, member of the Gynmastic Teachers' Institute, is in charge of the physical training work in the Women's residence this year.

Mr. John L. Dashwood, B.A., has been appointed Assistant in English in the School for Teachers. Mr. Dashwood received his training in London and holds his degree from the University of London. He has also taken special work in French at the Sorbonne, Paris, and has been engaged in the teaching of English in London and Brighton.

Mr. James A. Starrak has been appointed Assistant in the Manual Training Department to take charge of the work in the School for Teachers. Mr. Starrak has had several years' experience in the teaching of Manual Training. He comes to us from Moncton, N.B.

Miss Bessie M. Philip, the new Instructor in Household Science, received her diploma from the Ontario Agricultural College in 1912, and has since

been teaching in the Braemar School, Vancouver, B.C.

Mr. J. M. Scott, Assistant in Chemistry, resigned in March to join the staff of the Dominion Experimental Farms. Mr. Scott has since been appointed to the staff of the Nova Scotia Normal School.

Mr. N. C. Macfarlane, B.A., who was appointed Assistant in Chemistry, April 1st, is a graduate of the University of New Brunswick, and at the time of his appointment was Principal of the Superior School of St. Mary's and Gibson.

In the Day School, Mr. Hugh M. Brownell of Port Elgin, N.B., has been appointed to succeed Mr. Oliver Craik, who resigned to enter the University as a student. Miss Alice V. England, Model Diploma, 1914, has been appointed to take charge of Class Elementary III., and Miss Caroline Kruse has been appointed to take charge of Elementary II. for the present year.

The Macdonald College Club held its first meeting of the present season at the home of the President, Dr. Lynde, on the evening of October 1st. Mr. C. F. Crandall, managing editor of the *Montreal Star*, gave an enlightening address on the news-getting aspect of war, and Miss Nancy Curwell favored the club with two beautiful songs.

The Annual Corn Roast of the Bachelor's Club was celebrated on October 13th, when a party of some thirty assembled at the Teachers' Residence, resorted to Lighthouse Point, indulged in a feast of fruit, nuts and corn, and returned replete in the moonlight.

The annual tournament of the Bowling Club was held in the month of October. The "Biology Rink"—Duporte, Fraser and Lochhead (skip)—won the rink

trophy by defeating the "Miscellaneous Rink"—Boving, Snell and Walker (skip). The individual trophy was won by Mr. A. H. Walker. This is the third consecutive year for Mr. Walker as champion bowler.

The degree of M.Sc. was conferred upon Mr. E. M. Duporte, B.S.A., and upon Mr. J. M. Scott, B.A., at the annual convocation of the faculties of Arts and Science in April.

Messrs. Jull and Ness attended the sessions of the Graduate School of Agriculture in the University of Missouri in July and upon their journey to Columbia visited a number of the other Agricultural Colleges of the United States.

Mlle. Biéler spent the summer in Switzerland,; Miss Reid and Miss Kruse in Scotland; Miss Fisher in Winnipeg; Mr. and Mrs. Vanderleck in Nova Scotia; Dr. and Mrs. Hamilton in New

Brunswick and Prince Edward Island; Mrs. Brittain in Nova Scotia.

Among the recent publications of the Macmillan Company, New York, are "Physics of the Household," by Dr. Lynde, and "Elementary Household Chemistry," by Dr. Snell.

Recent births in the College community are those of a daughter to Mr. and Mrs. T. Fred. Ward, and a daughter to Mr. and Mrs. R. W. Edmison.

Mrs. Harrison has returned from her sojourn at Lake Placid, N.Y., much improved in health.

Dr. A. Grant Lochhead, son of Professor Lochhead, received the degree of Ph.D. from the University of Leipzig shortly before the outbreak of the war. He is detained in Germany by the military authorities and will probably not be allowed to leave until peace is restored.



Summer Workers at Macdonald.



Our Macdonald Heroes.



IN answer to the call of their country, in answer to their sense of right and honour, in answer to the innate love of country, liberty and home, upwards of twelve of our past students and employees have nobly sacrificed all their ambitions and chances of success, and have enlisted in the army that they may go across the sea to that great arena of war and fight the enemies of our freedom and our happiness.

No eulogy of these men is needed to cause our readers to appreciate the nobleness of their actions. The situation is only too plain to us all and when we see our men leave for the front we realise what a sacrifice they have made and the grave dangers they must incur.

Of those who are thus bravely answering the call to duty, six are Agricultural graduates of Macdonald. They are : Rod. Kennedy, a past editor of this Magazine, and Wm. Dreher, both of Class '12 ; "Scotty" Lothian and D. McLintock of Class '13 ; and Dick

Hamilton, Ralph Huestis, and C. Wilcox, each of Class '14. Other students who have spent one or more years at Macdonald and who have enlisted, are : Critchley of Class '13 ; Bert Matthews and Bailey of Class '16, and Turner and Maurice Signoret of Class '17. Two of our College employees have given up their positions and left for the front. They are Mr. Smith and Mr. Black, both of whom were trusted and faithful workers.

May Heaven watch over them all as they pass through the hardships and dangers bound to accompany such a struggle. May they come back safe and sound to their homes and loved ones, and as they come may "The flag that braved a thousand years the battle and the breeze" still float proudly at their head, still unbeaten, still victorious, and still the "flag of flags."

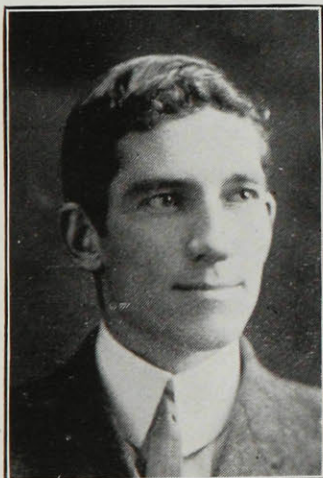
NOTE.—It was not possible to obtain pictures of all our men, but we publish those it was our good fortune to obtain.



"Mac" McIntock.



Smith and Black.



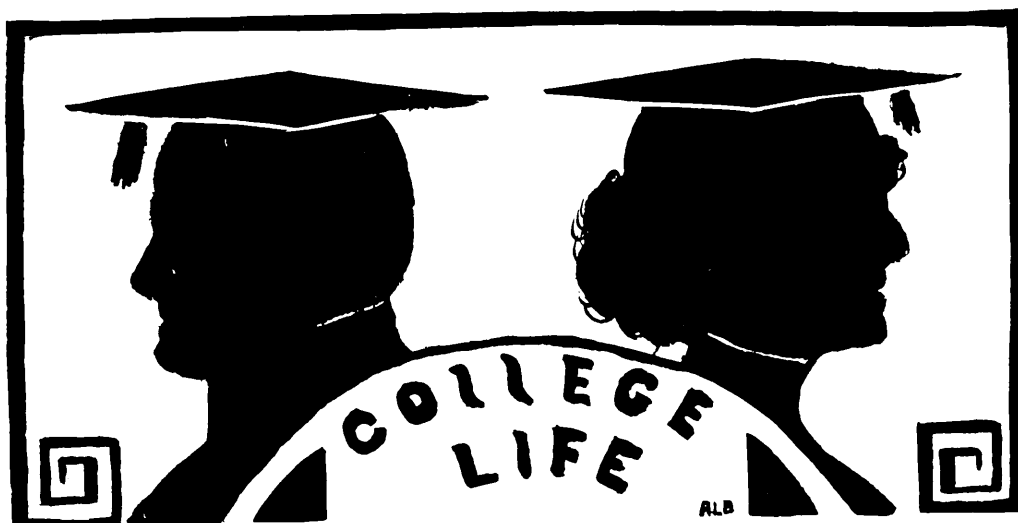
C. Wilcox.



Bailey and Matthews.



R. Kennedy.



THANKSGIVING AT THE COLLEGE.

Contrary to the general expectation, the Thanksgiving vacation proved very enjoyable for the students who remained at the College. After seeing their friends off at the station on Friday, they returned to the College in gloomy expectation of several days of hopeless boredom. In their mind's eye they pictured the empty halls where one's footsteps would re-echo, the silent corridors, and dark recesses in which lurked ghostly apparitions, ready to pounce upon the unwary.

This morbid presentiment was, fortunately, soon disproved. On Friday evening all the students gathered together in the Women's Gymnasium, and passed a most enjoyable evening in playing games. The same programme was repeated on the following evening.

Saturday turned out to be rainy, and in consequence, the plans which had been made for outdoor sports were abandoned. Through the ingenuity of several of the students, these were replaced by various amusements which could be carried on indoors.

Mrs. Laird and Miss Fisher contributed very materially to the entertainment of the women students by serving afternoon tea at their homes on Friday, Saturday and Sunday evenings.

Sunday passed off quietly with morning and evening services in the Anglican and Union Churches. Nearly all of us went for long rambles into the surrounding country in the afternoon, the weather being perfect.

Thanksgiving day was begun with outdoor amusements; tennis on the Women's Campus, and baseball and Rugby on the Men's. The Thanksgiving dinner was served at noon, the menu consisting of chicken, celery, potatoes, and pumpkin pie, to all of which ample justice was done by the hungry holiday makers. Sports were continued in the afternoon. When the "rest" returned in the evening they were greeted on every hand with expressions of commiseration and pity for having been so unfortunate as to miss the kind of holiday which Macdonald College always enjoys. R. S., '15.

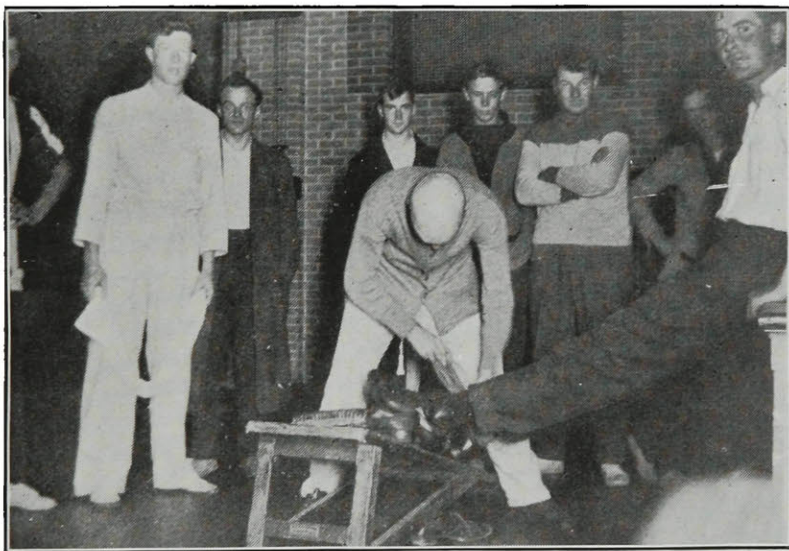
FRESHMEN INITIATION.

Wednesday, September 30th, is a day that will always be remembered by most of the Freshmen. For the two nights previous to this eventful occasion most of us had been lying low and had not ventured out of our rooms very much at night. However, when Wednesday night came around, we were all waiting to see what was to happen to us.

In the early part of the evening small gangs of husky (?) Sophomores could be seen prowling around the corridors. The Initiation itself did not commence until about 11.30 p.m., and some of us made use of the time before this by having a sleep until we were called for.

A loud shout proclaimed that the game was on, and the initiators hastened to their victims, and after blindfolding us with towels, led us down to the gym. One of the first things to befall us was an electric shock, which although it was not very strong, made some of the more sensitive squirm around a little. We

across the floor, the hands being tied behind the back ; shining boots ; and a couple of very good boxing matches. The bath was the next and last part of the programme. We were told to walk across an iron girder that had been greased in the centre. No one was able to do it, but as each one reached the greased part his hands slipped and down he fell into what was supposed to be ice cold water, but which was so nice that many of us did not want to get out. After that we were allowed to beat it to our rooms, and we tried, without much success, to look half human.



One of the Initiation Side Shows.

were then taken over to a chair and after sitting down an artist showed his talents by decorating us with pictures, painted with shoe polish. Our next seat was the barber's chair, where a couple of amateur barbers plied their art. A strip of hair, the width of a pair of clippers, was taken off from our foreheads to the backs of our necks. This strip allows the air to get in and stimulate the roots, thus preventing baldness. The rules and regulations had to be signed also. A few side shows helped to amuse the sophomores and the rest of the onlookers. Some of the most important side shows were: the hot oven; rolling a piece of fish

The Initiation was all over, and we all felt that we could now say that we were real "Sons of Macdonald."

A. E. A., '18.

SCIENCE FEAST.

On Friday, September 25th, the Homemaker girls gave a feast for Miss McGill and the Senior Science Girls. At 9.30 the girls began to gather in the gymnasium, where they were received by Miss Amy Reid, the President of the class. When all were assembled very attractive programmes in the ever popular colours of green and gold, were given to all. Six dances,

terminated by a "Paul Jones," were enjoyed and then came the essential "eats." These were ably served by some of the "Domestics" from the Home-maker Class. After a few extras, the watchman arrived, putting an end to a very jolly evening.

D. McG.

OPENING CONCERT.

Our introduction to the entertainments of Macdonald College was in the form of a Concert, given in the Assembly Hall on the seventh of September. We were still rather strange in our new surroundings, and the Concert, coming as it did after four days of idleness, helped to make us feel more at home. This is the first time we had heard the College organ, and the remarks heard on all sides were most complimentary.

The programme consisted of an organ recital by Prof. Stanton, vocal solos by Miss Rollins and Miss Curwell, and a recitation by Miss Harris. After the singing of the College songs the gathering broke up.

As we returned to our rooms several people were heard to remark that they hoped there would be many more such concerts during the year.

UNION CHURCH CONCERT.

A Concert was held in the Union Church on the sixteenth of October, in aid of the Children's Memorial Hospital. The students turned out in full force, and the hall was crowded. The programme was a splendid one, consisting of selections by the orchestra, several very entertaining recitations by Mrs. Mac-Millan, vocal solos by Miss Rollins and Mrs. Hortnell, a piano duet by Prof. and Mrs. Stanton, an exceedingly well rendered recitation by Master Caron, and a pleasing violin solo by Mr. Casey, of the Conservatory, accompanied by Miss

Williamson. Perhaps one of the most striking parts of the programme was when the orchestra played "It's a Long Long Way to Tipperary." Immediately the whole audience took up the strain and the hall was filled with the sounds of this popular song. After singing the National Anthem the audience dispersed, all except the lucky few who were invited to remain for refreshments, as a reward for selling tickets.

SUMMER REMINISCENCES.

During the summer, about fifteen students worked at the College. The Cereal Husbandry Department had the greatest number of men working for it; fully three-quarters of the men were on that department. Despite the fact that most of the men worked for Cereal they showed no ill-will towards the Horticulture Department, and paid numerous visits to the property of the latter department, where they made themselves at home.

During the early part of the season, before the Teachers and Science left, there were several games of baseball against teams from the surrounding country.

Canoeing and boating were the principal pastimes for the students during the summer, and many enjoyable excursions were made to the different islands and summer resorts around Ste. Annes.

There were three or four such excursions from different places, as Cookshire and Lennoxville. The Poultry Association also met here this summer. The students generally made themselves as useful as possible and told the visitors as much as they knew about the crops and methods followed at the College.

The evening before Professor Klinck left for B.C., the students and men of the Cereal Department presented him with a solid silver vase and bread-

basket. Messrs. Summerby and Boving expressed the sorrow of the department, as a whole, at the departure of Mrs. and Professor Klinck. Ora Hicks then wished Professor and Mrs. Klinck a safe journey and happiness on behalf of the students, while Jimmy Coull did the same for the men of the department.

Great excitement was evidenced by the student labourers when September 3rd approached. Collars and ties began to appear again, the wearers claiming that the mornings were getting chilly, thus necessitating the wearing of something around their necks, as they were subject to colds. Prior to that date, three full-dress rehearsals in the art of *Quick Table Service* were carried out each day. Bill was stage manager and kept things moving.

Altogether a rather enjoyable summer was spent at the college, and many of the students were sorry to drop work and start lectures again.

*M. M. T. I.

The evening of the 3rd of September proved quite eventful for the new model teachers in the Men's Building. About 11.30 the members of that ancient and honourable society, "The R. A. F.," met the new men teachers in a very informal manner. The teachers above mentioned were ushered into the presence of the assembled society, where they received a few well-chosen words of welcome from an able and eloquent orator. The meeting then adjourned to the moonlit campus, where a very interesting entertainment was given. The first item on the programme was a quarter mile sprint, in which very good time was made, the judge giving the time as 4-4-40. Then the elocutionary powers of the new teachers were tried, and, in some cases, were found wanting. The next and most amusing item of the pro-

gramme was "Hitting the High Spots." Quite an altitude was reached by some of the teachers before they decided to descend to the blanket. Boxing and wrestling concluded a programme which was hugely enjoyed by spectators on both sides of the campus.

*This signifies--Model Male Teachers' Initiation.

TEACHERS' LITERARY SOCIETY.

On the sixteenth of October, the teachers assembled in the gymnasium to elect the officers for the Literary Society from each section. Great was our indignation to find the lights in the gymnasium off, but nothing daunted, we betook ourselves to the hall and there held a very satisfactory meeting. If we may judge from short acquaintances, the new staff of officers is a most efficient one. The officers for the coming year are as follows :—

President of School for Teachers :—

Miss P. Harwood.

Hon. President, Section A :—

Miss Richmond.

President, Section A :—

Miss R. Echenberg.

Hon. President, Section B :—

Mr. Dashwood.

President, Section B :—

Miss G. Main.

Hon. President, Section C :—

Miss Robins.

President, Section C :—

Miss M. Travers.

Hon. President, Section D :—

Mr. Stanton.

President, Section D :—

Miss N. De Lisle.

Now that the Literary Society is organized we are already looking forward to its meetings. Every student should take an active interest in this society, firstly, because we are all members and secondly because everything we learn at

its meetings will some day be of great value to us.

The object of the Society is to promote throughout the College a taste for better literature. This is an important factor in the teacher's course, for if the teacher, when she takes up her work, has poor taste in books she can do very little for the betterment of her pupils. Every moment of the time promises to be very interesting, and the students should be only too willing to support the executive by their attendance at every meeting.

CLASS '15 OFFICERS.

Class '15 have commenced their Senior year with the following men in office :—

Honorary President.—Dr. F. C. Harrison.

Honorary President.—Professor H. Barton.

President.—Earl M. Ricker.

Vice-President.—J. Egbert McOuat.

Sec.-Treas.—Homer D. Mitchell.

Committee.—Jack H. McCormick ; Andrew G. Taylor.

LITERARY SOCIETY.

Honorary President.—Dr. W. D. MacFarlane.

Honorary Vice-President.—Dr. Alf. Savage.

President.—Jack H. McCormick.

Vice-President.—James H. King.

Sec.-Treas.—George B. Boyce.

Committee.—Lawrence J. Westbrooke ; John Egbert McOuat.

ATHLETIC ASSOCIATION.

Fred. Y. Presley.

E. Grove White.

With these men in the collar, Class '15 hopes to make the Session of 1914-1915 a crowning success.

CLASS '16 LITERARY SOCIETY.

On October 7th the 1916 Literary Society re-organized and elected the following officers :—

Hon. President. Dr. MacFarlane.

Hon. Vice-Pres. . . . Mr. L. C. Raymond.

President. L. W. F. Crothers.

Vice-President. C. E. Boulden.

Secretary. C. F. Peterson.

Treasurer. T. H. Biggar.

Committeeman. J. C. Moynan.

Our first debate was held on the evening of October 15th. The subject was : Resolved that the city boy of 15 years can develop into a better farmer than the country boy of the same age. Messrs. Schafheitlin and Peterson upheld the affirmative, while the negative was taken by Messrs. Boulden and Cochrane. Some very good points were brought out in favor of both sides. As no outside critics or judges were present, the class judged the debate and awarded the decision in favor of the negative. The subject of the debate was one which would concern every agricultural student either one way or the other. At the end of the debate, an open discussion took place, during which nearly every member present had the floor at least twice.

From now until we graduate we will be able to appreciate what benefits our literary society is giving us and the society should not suffer in any way from lack of interest. Our society, as well as the College society, affords us an opportunity for outside training. We are here for something besides class work, and our associations with each other, as individuals, will be bettered by active service in the Literary Society.

CLASS '17 LITERARY SOCIETY.

At a meeting of Class '17, held on October 6th, the following officers

were elected for the Class Literary Society:—

President.....Thomas Rankin.
Vice-Pres.....T. G. Hetherington.
Sec.-Treas.....A. R. Jones.
Committee Men..... $\left\{ \begin{array}{l} \text{W. D. Hay.} \\ \text{E. C. Hatch.} \end{array} \right.$

Mr. Wallace, the retiring president, is taking Science at McGill this year. His services will be greatly missed by the Society, but under the leadership of Mr. Rankin we are looking forward to some good live debates this term.

OFFICERS OF THE JUNIOR CLASS.

On Friday, Oct. 2nd, Class '16 met for the first time in the present term. Expressions of sorrow over the loss of so many of our classmates and of welcome to the new-comers took up the first minutes of the meeting, but soon the worthy president of our Sophomore year brought the purpose of the meeting—the election of class officers—before us, with this result :—

Hon. President.—Prof. Lohead.

Hon. Vice-President.—Mr. R. Summerby.

President.—G. C. Hay.

Vice-President.—J. G. C. Fraser.

Secretary.—J. H. McOuat.

Treasurer.—C. Lyster.

Committman.—W. E. Sutton.

FRESHMEN OFFICERS.

The Freshmen Class, 1918, called their initial meeting, Oct. 8th, 1914, and the following officers were elected:

Pres.: W. Brighton.

Vice-Pres.: C. B. Loomis.

Secy. Treas.: H. Carleton.

ATHLETIC COMMITTEE.

S. F. Filden,

Chas. Wilson.

Y. M. C. A. COMMITTEE.

E. E. Walsh,

P. T. Ashby.

The Freshmen Class of 1918 is one of the biggest classes that ever entered Macdonald College.

TALE OF A BOARDING HOUSE.

A prairie chick once lived in state
 Upon a lonely farm,
 To me she was a comely chick,
 And ne'er could do no harm.

Her life of ease from day to day
 For weeks went quickly by.
 She grew in bulk as fast as clouds
 Pass in a summer sky.

But one sad day, like Washington,
 The farmer took his axe,
 And with his strong right arm
 He gave her many mighty whacks.

The stroke had told, she lay a corpse,
 The farmer her had slain ;
 And taking hold her well-shaped legs
 He took her to the train.

She took the train at Winnipeg
 And travelled sixty hours,
 Then in a market place she hung
 Bedecked with paper flowers.

A week went by, a lady came
 And bought that still young hen,
 She ordered it to be sent home,
 And cooked for people ten.

It first appeared on Sunday noon
 When everyone partook,
 Then Monday night it came, cold meat,
 Which quite a few forsook.

On Tuesday morn, three times for luck
 It came on, creamed and high,
 And lo the following morn, behold
 That chicken was a pie.

My tale so sad I now must close,
 The chick has gone for good ;
 She died a wreck, as well she might,
 And proved unhealthy food.

D. S. C., T., '15.

Y.M.C.A. NOTES.

The first intimation usually received by new Macdonald students that there in a Y.M.C.A. at the College, is the reception, or "At Home," given by the Association in the men's gymnasium, to all students at the College and the various members of the Faculty. This reception, which is an annual event held as soon as possible after the School of Agriculture opens, was held this year on

divorce. It was a striking thing that few divorces were made. The boys declared the girls to be a jolly lot. It is said that first impressions are good ones, and, up to the present, they have had no reason to think otherwise. There was a varied programme, including orchestral selections and singing of popular songs. The evening ended by the singing of "Tipperary," "God Save the King," and the giving of College yells.



Y.M.C.A. Executive.

October 2nd. Its object is to make the boys and girls acquainted with each other, and the one held this year was apparently a success in this respect. This result was obtained by means of an Introduction Committee, a game of "Find Your Partner," and also by means of a Matrimonial Bureau, an organization whose business it was to make couples acquainted for the evening. If the couples became dissatisfied with each other they might return and get a

The Y.M.C.A. plays an important part in the Men's College life. They get a chance to hear good outside speakers talk on subjects of present interest in the religious and social worlds, and also, at intervals, some of the professors give addresses, and thus get a chance to give the fellows some advice from their own experiences. The Association also holds fortnightly "Sing Song" Services in the Assembly Hall, on Sunday evenings after church, which

are much enjoyed by all. Organ recitals, vocal and instrumental solos are given between the hymns and are much enjoyed.

The number of men students in residence is larger than that of any previous year, and the Executive Committee are looking forward to a splendid year's work.

Y.M.C.A. EXECUTIVE COMMITTEE.

President.—R. E. McKechnie.

Vice-President.—J. H. McOuat.

Sec. Treas.—A. R. Milne.

Committee.—H. H. Walsh. J. G. C. Fraser. P. H. Ashley. G. B. Walsh.

Musical Leader.—A. E. Hyndman.

CLASS '17 OFFICERS.

(Too late for classification.)

Hon. Pres.—Prof. H. Barton

Hon. Vice-Pres.—Mr. G. Emberley.

Pres.—W. R. Cooper.

Vice-Pres.—A. R. Milne.

Sec.—F. J. Longworth.

Treas.—H. C. Bailey.

Committee-man.—C. B. Bradford.

Cuddle Doon.

By Prof. A. W. Kneeland..

Cuddle doon, my bairnie,
The night is drawing nigh;
The silver moon the hills aboon
And stars sing, "Cuddle doon."

Cuddle doon, my bairnie,
I hear the bittern cry
From sleeping lake and sedgy brake,
Aye saying, "Cuddle doon."

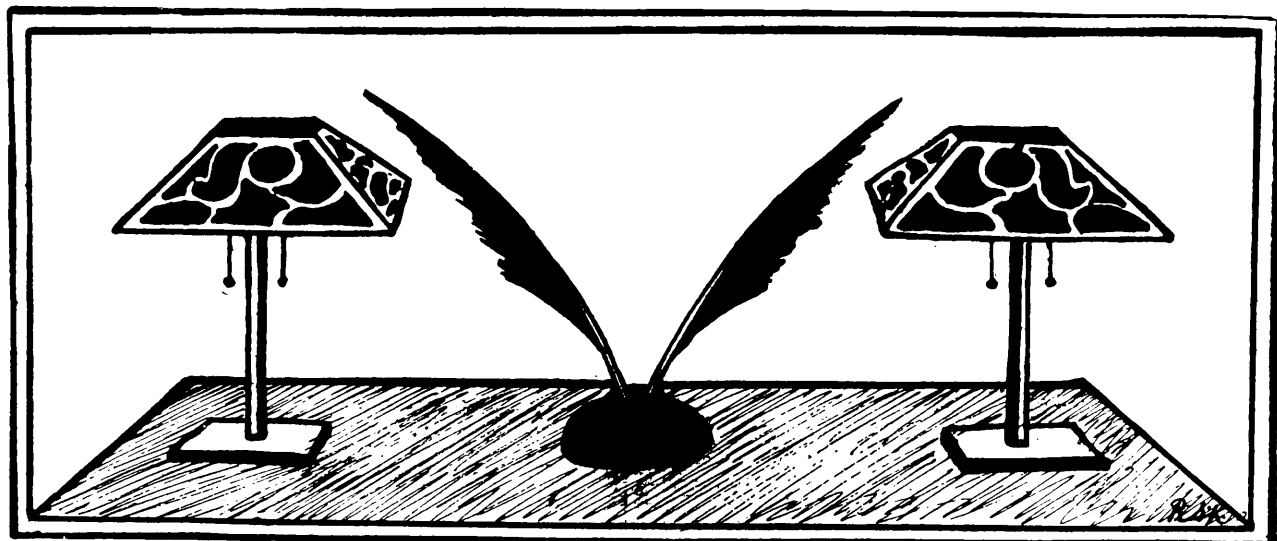
Cuddle doon, my bairnie,
The tasks have all been done;
On noiseless wing the fairies sing;
So, dearie, cuddle doon.

Cuddle doon, my bairnie,
The sun has gone to rest
On ocean's breast, in gleaming west,
Now, bairnie, cuddle doon.

Cuddle doon, my bairnie,
With sleepy, tired eyes;
Let angels bright in robes of white
Watch while ye cuddle doon.

Cuddle doon, my bairnie,
God's hand is over all;
Or great or small, He hears their call,
So, fearless, cuddle doon.

Cuddle doon, my bairnie,
The night will soon be o'er,
When moon and star in realms afar,
Themselves will cuddle doon.



Under the Desk Lamp.

WELCOME TO THE FRESHMEN.



FRESHMEN of Class '18, we welcome you to our midst. We welcome you to one of the best institutions of its kind in the world. We wish you to share in its joys and its pleasures, in its duties and in its tasks, and we wish you to become co-workers with the senior students and the staff in forwarding the great work for which this College was designed and created.

You are perhaps even more fortunate than some of us in that you have all your course to look forward to. You can avoid, if you will, many of the mistakes which we have made when Freshmen, those long periods of time wasted in doing nothing, and leaving our work for the morrow, that backwardness in hastening to join the Literary Societies and taking an active part, or shirking a duty whenever we were asked under the plea that we had not the time.

We do not want to preach, for experience is the best teacher, but we do wish with the utmost sincerity that you may guide your course here in such a way that it will be the most pleasurable and profitable four years of your early life.

WELCOME TO THE GIRLS.

Of all the themes upon which the scribbler for a magazine has to dilate, the writing of a welcome to the girls is at once the most difficult and the most pleasurable.

The former because one feels the total inadequacy of any pen driven by a mere man to do justice to the charm, grace, and delightsomeness of the subject ; the latter because of the sheer joy it gives one to take one more opportunity of paying tribute to the fairest of the fair.

We welcome you, the girls of Macdonald, because you are girls ; we welcome you because you are the girls you are, and we welcome you because—truth must out—we cannot bring ourselves to think of life without you.

To some of you, the coming to Macdonald is an event in the history of your young fresh lives ; to some of you, the coming among us is just an incident. Come here how you may, we ask you to join us in doing honour to our Alma Mater.

Those of you whose object—for the time being at any rate—is to assimilate the tenets which shall enable you to train the children of the province, will

no doubt find depths undreamt of in the well of pedagogic lore.

Those of you who have elected to pursue the gentle art of cooking and delve into the hidden mysteries of the science of the household, will find poetry in the grilling of a stake, will learn the music of the kettle, and be imbued with the philosophy of the dietetic study.

You have a wider sphere than all this, important as it is ; you are called upon to exercise the restraining influence of the feminine mind ; you are expected to take your part in all the larger college life ; you are looked upon as a part and parcel of every College society ; you are in fact, the completion of the College scheme.

In return, you are to be the sacred charge of every man who calls himself a student of the College.

McGILL HONOURS HER FOUNDER.

On the 6th of October there occurred the one hundred and seventieth anniversary of the birth of that noble, patriotic, and public spirited man, the founder of old McGill, the Honourable James McGill, who founded that great university which bears his name.

McGill takes great pride every year in remembering their benefactor by suitable exercises and the giving of the annual University lecture to the students of the many faculties.

James McGill was born in Glasgow, Scotland, on the 6th of October, 1744. In early youth he came to Canada, where by dint of hard work he rapidly amassed a large fortune. He received many honours from his fellow citizens, and was Member of Parliament for Lower Canada.

In his will he bequeathed his property of Burnside, consisting of 46 acres and \$10,000 in money to found a college, " which should be named and perpetually known and distinguished by the appellation of McGill College."

To-day we, as a faculty of McGill, wish to join in honouring the name of the noble man who did so much to forward the great cause of education, and to bring its benefits within the reach of all those who wish them.

LATENESS OF NUMBER.

For various reasons, this number of the Magazine is late in reaching its readers. Some of these reasons are legitimate, while others are not. Among the " reasonable " reasons is the fact that the Ladies' Section of our Editorial Board was not appointed until well on in October, and thus some of the material was naturally kept back which was needed for this issue. We also had some printer's troubles, which served still further to put back the date of issue.

Most of the printer's troubles arose from the " unreasonable reasons," for much of the material that should and could have been handed on on time was days behind. Thus the poor printer was compelled to wait patiently until said material put in an appearance and filled up the gaps. Printers are only human, and the wrath which they call down upon the Editor for being behind hand is most picturesque and lurid. The Editor, knowing that getting mad, raising ructions of all descriptions, or blaming it on the right parties, will not produce the Magazine any quicker, waits until " Hank " Hubbard gets through with his oration and then takes the 5.15 p.m. for home, fully determined to write a scathing Editorial on the " Weakness of Human Nature, or Why are we always late."

Under the soothing influence of a College supper, his wrath evaporates and nothing of note happens, except that he goes out looking for more late material that evening, and tries to look as if three days' time was to him no more than

a soldier's life-blood to the Kaiser. But we must stop for we are wandering. If *You are Guilty*, any member of our illustrious Board, let a word to the wise be sufficient and next issue *Be on Time*.

A NEW DEPARTMENT.

In this issue there appears for the first time a new department entitled, *Macdonald College Extension Work for Rural Schools*. It is the intention of the College authorities to use this space for the purpose of reaching the Schools of this Province with some of the best information obtainable, with regard to school work in the general sense of the word. In addition, the Section will devote a good deal of space to articles on Agriculture, calculated to be of interest and benefit to the teachers and scholars of our country schools.

A copy is to be put into every school in the Province by the College, and about the same space will be used in each of the four issues of the College year to carry on this good work. It is a new idea, but we believe a good one, and the results will become more pronounced after the plan has been in operation for some time.

Firstly, it will help to link up Macdonald Alumni teachers more closely with their Alma Mater; secondly, it will give the College greater publicity among the pupils of the Academies and Model Schools, and cause them to consider Macdonald as a suitable place for continuing their education. In the third place, the articles published cannot help but be of lasting benefit to the schools in general.

We wish the new venture every success and will endeavour to do all that lies in our power to make it such.

THE NEW COVER.

After getting many designs made, and after many discussions and many wordy arguments, we have at last succeeded in

obtaining a new cover for our Magazine. We have done our best, and are now prepared for the decision of the subscribers to our Magazine. As far as the design goes, we are very proud of it. We have been told by persons who know that it is one of the neatest and most attractive designs they have seen. To Miss Thompson, our enthusiastic Art Teacher, we owe a very heavy debt of gratitude for designing and sketching the new design, and we hope she will accept our most hearty thanks as here given.

Many other shades of paper can be used with this design, and any coloured ink may be used if so desired. We would be glad to have you tell us what you think of the paper used in this cover, or to give your ideas as to any colour which you think might go better with such a design.

POPULARITY CONTEST.

The now famous popularity contest deserves a few words of remembrance from our humble pen. Although it had small beginnings, its end was grand and glorious. Enthusiasm and interest became greater and greater towards the close, and the collecting of subscriptions become more intensive. When the results were made known we found that we had received over three hundred dollars in cash and over one hundred promissory renewals, which are about as good as cash.

Space forbids of our writing any of the details of this contest, but we publish herewith a list of the winners in the different sections of the contest.

POPULARITY CONTEST PROPER.

Miss Radley, Silver loving cup, engraved.

Miss Carlyle, Life subscription to the Magazine.

Miss O. Tait, Ten year subscription to the Magazine.

Miss E. Kitchener, Five year subscription to the Magazine.

Miss I. Sutherland, Five year subscription to the Magazine.

FOR SECURING MOST CASH SUBSCRIPTIONS.

H. J. M. Fiske, Agr. '14, Life Subscription.

J. H. McOuat, Agr. '16, Ten years' subscription.

A. R. Milne, Agr. '17, Five years subscription.

Miss B. McFarlane, Sc. '14, Five years subscription.

SCHOOL SECURING MOST SUBSCRIPTIONS.

School of Agriculture, Enlarged Picture of Students in that School.

EXCHANGES.

We feel bound to confess that we are altogether too neglectful in the matter of mentioning and reviewing exchanges. This is not because they are not received nor because they are not appreciated, but because in most instances we really have not the time to give these College and other publications a leisurely perusal and then a short review of the goodly articles found in their pages.

One thing is noticeable in nearly all of them, and that is progress. It may only be a change of cover, a new arrangement of matter, or some extra good illustrations, but there is enough of it to prove that College Magazines are, as a whole,

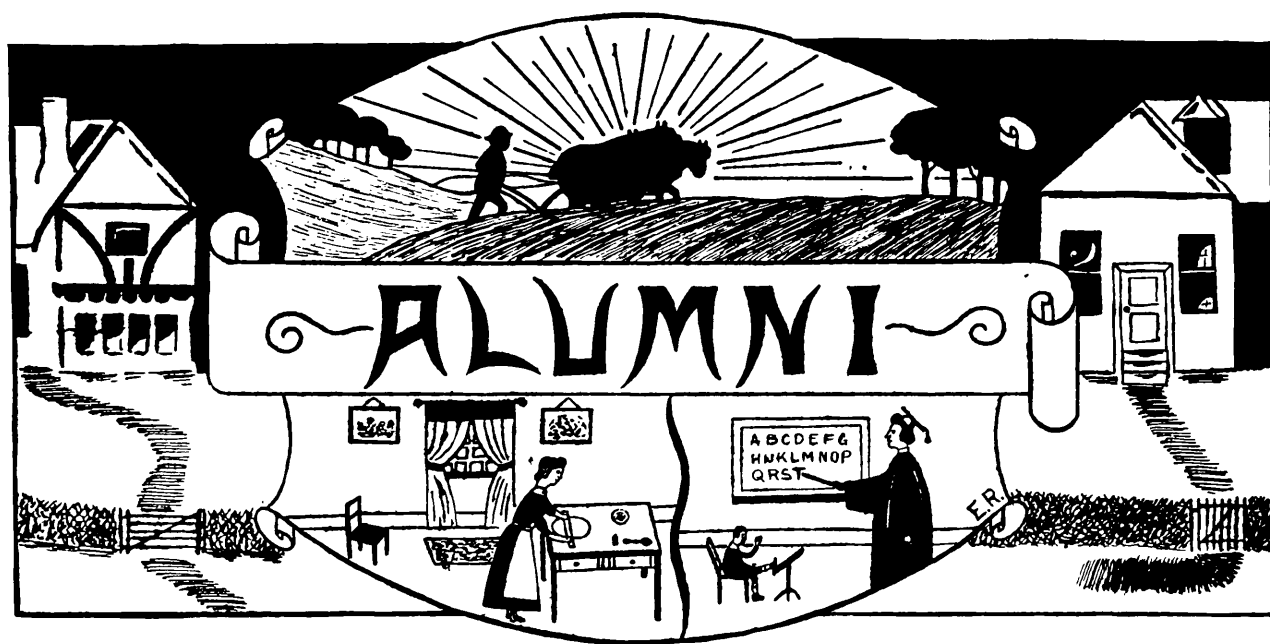
not only holding their own, but still aspiring to that far off goal—perfection.

Among the recent numbers of such exchanges which we have received are the *Dalhousie Gazette*, *The Alumnus*, *The Illinois Agriculturist* for October, and which is very well illustrated and gotten up, *The Acta Victoriana*, now boasting a rather simple but attractive new cover, and the *Ottawa University Review*, also in a pretty new cream coloured cover. One of our best friends, the *O. A. C. Review*, has not yet been received, but will probably be all the better when it does arrive.

Apart from College issues, we beg to acknowledge with thanks many useful publications, among which is a delightful little booklet, entitled, *Just a Sprig of Mountain Heather*. It is published by the Parks Branch of the Department of the Interior, and is described as being "A story of the Heather and Some Facts about the Mountain Playgrounds of the Dominion." The Farmer as a Manufacturer, forms an interesting bulletin, being written by A. T. Stuart, B.A., of the Chemistry Dept., Ottawa. Two new government publications now reach us regularly, both of which are fulfilling a long felt want in many places—we refer to the *Agricultural Gazette* and the *Bulletin of Foreign Agricultural Intelligence*. We only wish we could print many of the good articles they contain.

The Advantages of Richer Cream is also an interesting little pamphlet, well gotten up and quite instructive.





SCHOOL FOR TEACHERS.

Miss Mabel Biltcliffe, Class '14, is teaching in the Dufferin School, Montreal.

Miss Grace Hawthorne, Class '14, is teaching in the Kensington School, Notre Dame de Grace.

Miss Myrtle Lay, President of Elem. Class '15, is teaching in a school in Alberta this year.

Miss Pearl Bowers, Class '14, is teaching in Sherbrooke.

Misses Laura and Nettie Hyde, both graduates of Class '14, are teaching at Shawville.

Miss Elga Le Mesurier, Class '14, is teaching in the Girls' High School, Quebec.

Miss Annie Mills, Elem. Class '15, is teaching in East Angus.

Miss Bertha Pomfret, Class '14, is teaching in the Riverside School, Montreal.

Miss Sydney Pitman, Elem. Class '15, is now teaching in Maisonneuve.

Miss Jessie Lindsay, graduate of Class '14, is teaching in a school in St. Johns, Que.

Miss Olive Tait, President of Class '14, is teaching in the Fairmount School, Montreal.

Miss Elizabeth McIntosh, Class '14, is teaching in the Westmount Academy.

Miss Ethel Roy, Class '13, is teaching in a school near Coaticook.

Miss Ada Wilson is staying at her home in Danville this year.

Miss Bogie, of Class '13, is principal of Kingsey Consolidated School, and has for her assistant Miss Adcock, of Class '11.

Miss Mabel Bothwell, Class '14, is ably fulfilling the duties of Principal in South Durham Model School.

Miss Elsie Elliott, of Class '11, is teaching in Shawinigan Falls.

Miss Alice Dresser is Principal of the Model School at Ulverton.

Miss Myrtle Standish, of Class '14, is teaching in the Peace Centennial School, Montreal.

Miss Eliza Cowan, Class '10, is teaching in Kensington School, Notre Dame de Grace.

Miss Gladys Duffy, Elem. Class '15, is teaching in South Durham Model School.

SCHOOL OF HOUSEHOLD SCIENCE.

Miss Eva MacFarlane, Class '14, has entered the Toronto General Hospital to take a three months course in the Diet School.

Miss Florence Percival, Class '14, is taking a similar training in the Winnipeg General Hospital.

Mr. and Mrs. George B. Colby announce the marriage of their daughter, Ada May, to Mr. Frederick Steadman Browne, B.S.A., on Wednesday, Oct. 21, at Ayer's Cliff, Que.

Miss Lilian de Villiers, Class '14, is at present visiting friends in England before returning to her home in South Africa.

Miss Margaret Andrews, Class '13, has accepted a position in the Children's Memorial Hospital, Montreal.

Miss Margaret McNaughton, Class '13, is assistant Dietitian in the Michael Reese Hospital, Chicago.

Miss Ethel J. McLaren, Class '12, is at her home in Buckingham, Que. She is one of those engaged in the patriotic work of making clothing for our men who have gone to the front.

Miss Norma Atkinson, Class '13, is at her home in Cornwall, Ontario.

Miss Alexina Carlyle, Class '13, is teaching Household Science in Vermilion, Alberta.

Miss Margaret Hay, Sc. Class '11, is staying with her parents at Lachute, Que.

SCHOOL OF AGRICULTURE.

O. MacLaren, '15, who was taking his Senior year at Guelph, has enlisted for active service.

W. Sutton, '15, has returned to join class '16 ; we congratulate the class on their acquisition.

J. Spendlove, '15, has also returned to join class '17.

Creaghn, '15, has joined Science '18 at McGill.

B. Matthews, '16, went over with the first Canadian contingent.

H. Bailey, '16, is in the same regiment as Matthews.

C. E. Chute, '15, is running the farm during his father's absence in South America.

J. M. Hacker, '15, has joined Class '16.

R. Creed, '15, is on the seed inspection work in P.E.I. He will join Class '16 after Xmas.

M. Robinson, '15, has returned home to North Hatley from the West.

M. P. Sharman, '16, is fattening "beef" at Martinville.

J. Gaetz, '16, is managing Mr. McOuat's farm at Lachute.

L. R. Jones, '16, is Horticultural Assistant to Mr. Clement at Vineland Station, Ont.

H. Gordon, '16, is fussing in parts unknown, probably Vancouver, B.C.

O. Le Moine, '16, is taking Law '18 at McGill. The only other faculties at McGill open to him are Science and R.V.C.

Signoret, '17, has been recalled to join his regiment in France.

F. De Zouche, '17, is training in Ottawa ; he hopes to go with the 2nd contingent.

G. W. Wallace, '17, has joined Science '18 at McGill.

E. Hodgins, '17, would have come back, but his cousin informs me that his girl wouldn't let him.

Du Chene, '17' is at home in Quebec.

W. Turner, '17, left Canada with the 1st contingent.

Maskery, '17, is on a farm at Lennoxville.

Miss Dooley, '17, is chicken farming in the West.

A. E. Piddington, '17, is in Montreal. He hopes to get a commission in the 2nd contingent.

Tull, '17, is farming in Oxford County, Virginia, U.S.A.

Macdonald College Agriculture Alumni Association.

CLASS '11.

Mr. C. M. Williams has been appointed to a position as Horticulturist at the Experimental Farm at Nappan, N.S.

Mr. R. W. D. Elwell, B.S.A., spent a short while at Macdonald en route to England, during the early part of July.

Mr. and Mrs. R. P. Gorham are the proud possessors of a baby daughter in the person of Marie Marcelle Gorham. Marie Marcelle arrived on the scene of activities at Fredericton, N.B., on June 29th. Congratulations to Mr. and Mrs. Gorham, and best wishes to the new arrival.

A. Savage, B.S.A., who has for the last three years been pursuing studies at Cornell towards a D.V.M., has succeeded in having those letters attached to his name. Alf. has carried off the honors throughout his course and is now engaged on the Macdonald College staff as veterinarian and henceforth is known as Dr. Savage.

Mr. F. S. Grisdale, once recognized as the "woman hater" of Macdonald College, has, we understand, taken unto himself a wife. Mr. and Mrs. Frank are living at Olds, Alta., where Mamma's fair haired boy is Instructor in Agronomy at the Agricultural School. Grisdale used to be considered of the Kitchener type, but life in the wild and woolly west has apparently changed his views towards the feminine race. We extend our best wishes to the young couple in their new sphere of activity.

Mr. W. J. Reid has found single life in P.E.I. too monotonous, and has sought

to rectify matters by getting married. The event took place on July 29th, when he took as his better half Miss Georgia Carruthers, a popular and charming Charlottetown lass. Mr. and Mrs. Reid spent their honeymoon in Ontario, and called on their Macdonald friends in passing. They will reside at Charlottetown, P.E.I.

CLASS '13.

It is with no little pride that we once more call attention to one who was unquestionably the best student in class '13, and probably the best Macdonald College has yet seen. Mr. E. M. Duporte, now Assistant in Biology, had the degree of M.Sc. conferred on him in the spring of 1914, less than a year after his B.S.A. His class all join in congratulating him on the obtaining of this well-deserved distinction.

Up to the present time two of the members of class '13 have volunteered and gone to the front. These are D. E. Lothian and L. D. McClintock. The former, true to his descent, has gone with the Toronto Highlanders. To any who have known "Scotty" and recall his pluck and bull-dog determination, he must surely appeal as a good soldier.

Not less fit is old "Mac," the strong man of class '13, as he has been called. He gave up a position as Macdonald College Demonstrator at Cowansville to enlist with the 9th Artillery Brigade. We all feel proud of them, and feel sure that they will do credit to their Alma Mater and their Country.

In June last, W. D. Ford, B.S.A., received an appointment as Animal

Husbandry expert for the Province of New Brunswick. This is a new position and the Agricultural Department of that province are to be congratulated on the selection they made. As the position is a new one, Ford will have all the work to plan out, which will, of course, entail both advantages and disadvantages. At the present time he is devoting a good deal of attention to pushing the sheep business, as he thinks there are great openings for sheep raising in New Brunswick.

Still another break in the ranks of the Bachelors of Class '13 has to be reported; they are becoming sadly depleted. The latest deserter to be reported is J. K. King, Macdonald College Demonstrator at Shawville. King was always a good sprinter, but in this event he surprised even his best friends. He was married in August to Miss Pearl Heatherington of Waterloo, also of Macdonald, Teachers '13. Although we lament the desertion, we yet wish him all happiness in the ranks of the permanently attached.

CLASS '14.

Mr. C. F. Coffin is manager of the "Riverode Farms" at Chagrin Falls, Ohio. He reports a busy summer.

Mr. P. R. Cowan has been engaged during the last few months in connection with the exhibitions put on at various fairs by the Central Experimental Farms. He has, however, been transferred to the Division of Botany, where he is engaged in connection with potato inspection work.

Mr. F. L. Drayton has received an appointment as Assistant in Plant Pathology and Bacteriology at the Central Experimental Farm in the Division of Botany.

Mr. H. J. M. Fiske is manager of the St. Catharines Cold Storage and Forwarding Company at St. Catharines, and expects to take post-graduate work this winter.

Dr. Hamilton has been appointed Lecturer in Nature Study at Macdonald College.

Mr. C. H. Hodge has been engaged in College Demonstration Work during the summer months. He has, however, recently been transferred to Macdonald College, where he is assisting in the Cereal Husbandry Department.

Mr. R. E. Husk is Macdonald College Demonstrator for Huntingdon Co.

Mr. J. M. Lecair is a district representative for Abitibi.

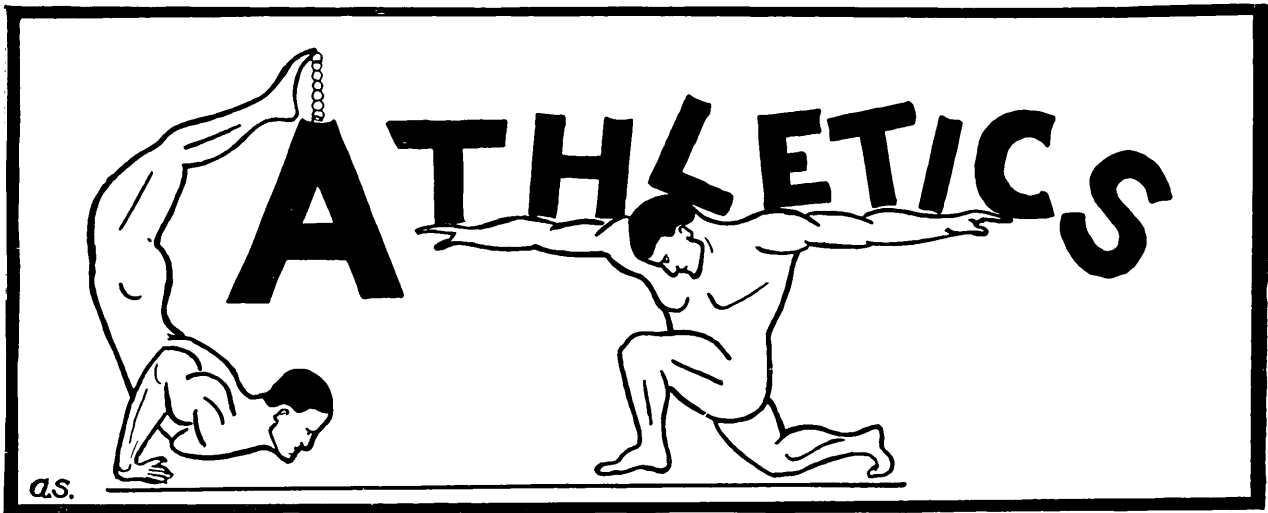
Mr. G. G. Moe has received the appointment of Chief Assistant in the Cereal Division at the C. E. Farm, Ottawa.

Mr. G. W. Muir has been appointed as assistant in the Animal Husbandry Division at the C. E. Farm, Ottawa.

Mr. Wm. Newton is assistant Soil and Crop Instructor for B.C., with headquarters at Vancouver, B.C.

Mr. B. T. Reid is assistant Field Husbandman at the Agricultural School, Woodstock, N.B.





EVERYONE is eagerly anticipating an extremely interesting year for Athletics, owing chiefly to the large freshman year, a number of whom show a decided promise of future developments, and also to the dawn of the new Rugby Football team to which, although not yet completely taken over by the Athletic Association, we extend a cordial hand in welcome, and wish them every success in the future.

After the reorganization of the Association, they held their First Annual Meeting on October 5th. The following are the officers of the Association.

- Hon. Pres.*—Dr. Harrison.
- Hon. Vice-Pres.*—Dr. Savage.
- Pres.*—H. J. Evans.
- Vice-Pres.*—A. E. Hyndman.
- Secretary.*—W. Sutton.
- Treasurer.*—J. G. C. Fraser ; also two committee-men from each of the four years.

Sr. Year	..	{ F. Presley.
		{ G. White.
Jr. Year	..	{ R. Schafheitlin.
		{ C. E. Bouldin.
Sophomore Year		{ S. Skinner.
		{ H. Bailey.
Freshman Year		{ C. A. Wilson.
		{ S. Tildon.

We cannot help admiring the keen interest shown by both new and old students this year in Soccer and Rugby, and there is a decided promise of good teams in both games, which have so far been well borne out by their success in the last games. We hope, or rather may I say, we feel sure that there is sufficient scope for both teams to develop satisfactorily side by side, bringing glory to the College which we all love so well.

It is somewhat unfortunate that the season for outdoor games is so short, but we would like to remind everyone interested of the indoor games to follow, which are always looked forward to with the greatest interest.

This year we hope to see a large attendance at Gymnasium, which is only fair to Major Sharp, whose untiring energy has won for him the respect of every former student. At Mr. Sharp's suggestion, it was decided to buy a wrestling mat, which we feel sure will be made good use of ; in addition to this he has himself promised to give a course in swimming, time permitting, and we hope everyone will take advantage of this.

In conclusion, we extend a hearty vote of thanks to the retiring committee, and especially to Mr. Ricker, whose untiring energy made last year's athletics an

unqualified success, and we are assured that Mr. Evans will do his best to carry on his predecessor's good work.

FIELD DAY.

That day of days, so eagerly anticipated by every student, where rivalry is at its highest, and every nerve and muscle of those contesting is strained to the utmost to do the best for his year,

closely followed by J. G. C. Fraser, with a score of 19. H. Evans is to be congratulated on being the only man able to break a College record, jumping 5 feet 3 ins. in the high jump.

The officials of the track were as follows :—

Starter.—Prof. Barton.

Timekeepers.—Mr. A. R. Ness ; Mr. Jull.



Men's Athletic Executive.

was unfortunately spoiled to a considerable degree both by the unpropitious elements and the consequently small attendance of the ladies. In spite of these great drawbacks, every one did his best, and some of the events were very keenly contested. E. Grove White, who, on account of his splendid performances, won the Individual Championship with a score of 20 points, was

Announcer.—L. C. McOuat.

Scorers.—J. F. Moynan ; H. D. Mitchell.

The following were the order of events and their winners.

2 mile.—1, G. Grove White ; 2, S. Skinner ; 3, McFarlane Time, ———.

One-Quarter Mile.—1, E. Grove White ; 2, W. Sutton ; 3, S. Skinner. Time, 57 sec.

100 yards.—1, C. Fraser ; 2, H. Evans ; 3, W. Sutton. Time, 10 1-5 sec.

1 mile.—1, E. Grove White ; 2, S. Skinner ; 3, G. Matthews. 5 min. 23 sec.

220 yards.—1, C. Fraser ; 2, W. Sutton ; 3, H. Bailey. Time, 24½ sec.

Pole Vault.—1, C. Bradford ; 2, N. Norcross ; 3, C. Ewart. Height, 8 ft. 1 in.

High Jump.—1, H. Evans ; 2, W. Hay ; 3, C. Bradford. Height, 5 ft. 3 in.

120 yd. Hurdles.—1, W. Hay ; 2, C. Hay ; 3, D. Todd. 20 1-5 sec.

1 mile.—1, E. G. White ; 2, S. Skinner ; 3, G. Matthews. 2 min. 17 1-5 sec.

Shot put.—1, H. Bailey ; 2, E. M. Ricker ; 3, H. Evans. 32 ft. 9 in.

Running Broad.—1, C. Ewart ; 2, C. Fraser ; 3, H. Evans. 18 ft. 11 in.

Throwing Base Ball.—1, W. Sutton ; 2, H. Bailey ; 3, H. Evans.

Hop, Step and Jump.—1, H. Evans ; 2, C. Fraser ; 3, W. Hay. 37 ft. 10 in.

The Presentation of the medals and cups won on Field Day took place in the Assembly Hall, at 8 p.m. After the Chairman's remarks, Dr. Harrison gave an address keenly appreciated by all, especially those interested in athletics, and then Miss McMillan, assisted by Mr. Jull, presented the prizes. The program, which was supplemented by an organ and a vocal solo by Mr. Stanton, came to an end after the singing of the College songs and the National Anthem, and we then realized that Sports Day was over for another year.



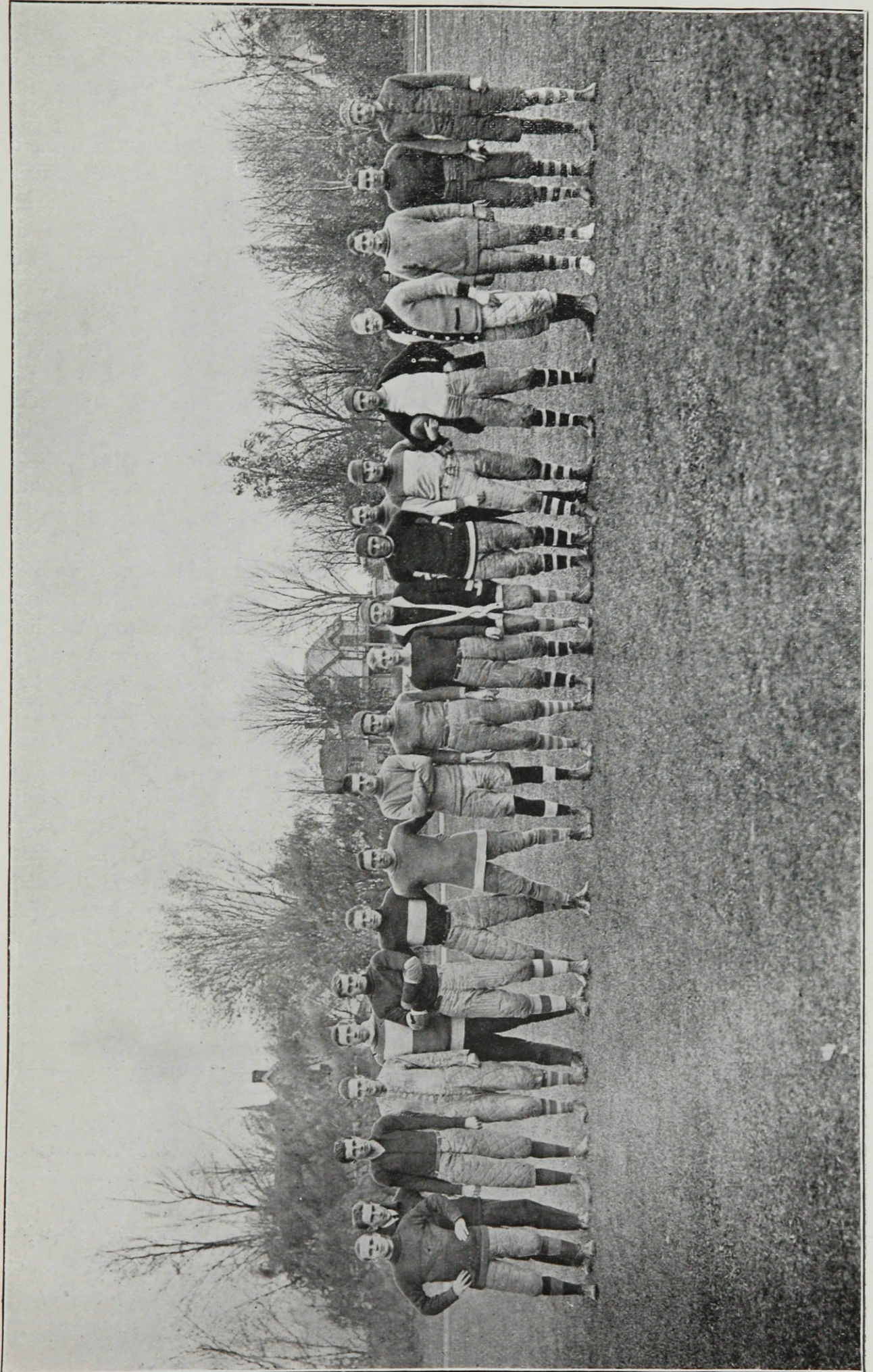
Macdonald's Soccer Team.

The Senior year, thanks to E. Grove White and H. Evans, won the day with a total of 39 points. The Juniors came second with 35 points, the Sophomores a close third with 34 points, and the Freshmen last with 7 points.

The Cup for the Relay team fell to the Juniors.

SOCCKER.

Association Football has met with considerable success this year from all those interested, and we hope the team will continue as well as it has begun. The first match, played on Oct. 19th, against the College Farm, resulted in a win for the College by 2 goals to none.



Macdonald's Rugby Team.

The second match, played on Saturday, 24th Oct., against Presbyterian College, McGill, resulted also in a victory for the home team of 2 goals to none. The play was fast and good, excellent team work and combination being shown by the men, especially those in the forward line. The following was the line-up for the College team :—D. Todd, goal ; H. B. Roy and H. C. Bailey, full backs ; G. Boving, G. Hay, and Grang, half-backs ; G. Matthews, C. Bradford, Viane, L. Skinner, and W. Williamson, forwards.

We hope that the interest exhibited will continue and help the team to keep up the good reputation which it has earned.

FOOTBALL.

Although this is the first year of Rugby Football at Macdonald College, the first two games show that the outlook for the future is favourable.

The first game was played on McGill Campus on Oct. 17th. The rain of that morning and the day before made the field a sea of mud in which the players could do nothing but slide around. Good football was impossible. McGill, with their heavier team and greater experience, had easily the better of the play. They depended mainly on bucks through the line, with occasional end runs in which all the bucks took part. For McGill, Hall shone at half-back, while for Macdonald, Carlton's two long

runs through the McGill team were easily the feature. The final score of 26-0 was not by any means a fair criterion of the game.

On the 24th, St. Lambert played at the College. The field and day were perfect for football, the dry sod being ideal for our light back division. St. Lambert was considerably heavier, but not as fast. Straight football was used chiefly, with some buck play on Macdonald's part, which always gained ground. St. Lambert scored first. A rouge on Carlton. College soon drew ahead on fake back, Tilden carrying the ball around the end and through St. Lambert backs for a try. The half ended with a score of 5-2 in Macdonald's favor. The second half played continued in much the same manner. St. Lambert, however, seemed to have the upper hand, due to rather questionable decisions of the referee, a St. Lambert man. However, we must be prepared for such things. St. Lambert made a try which was not converted and 2 rouges in the half a total of 7 points for the half. College made 6 points on a try by Tilden, which was converted. The game ended 11-9 in favor of Macdonald.

The runs by Evans and Carlton through the St. Lambert team for big gains and the generalship of Tilden at quarter were the outstanding features of the game.

What Do You Think?

First you sing a song or two
 And then you have a chat,
 And then you eat some chocolate fudge,
 And then you take your hat
 And take her hand, and say " Good
 night "
 As nicely as you can.
 Now isn't that an awful night
 For a great big healthy man ?

—*De Omnibus Rebus.*

Girls' Athletics.



THE first meeting of the Athletic Association was held on the evening of Sept. 15th. Miss Pearle Leet, as president, took the meeting, and the officers for the coming year were elected with the following results :—

Hon. President.—Miss Richmond.

Hon. Vice-President.—Miss Roberts.

President.—Miss P. Leet.

Vice-President.—Miss G. Cornell.

Secretary.—Miss A. Reid.

Treasurer.—Miss Effie Robinson.

Representative of Model Class.—Miss Lulian Robinson.

Representative of Elementary Class.—Miss M. Baker.

Representative of Junior Science.—Miss J. Hodge.

Representative of Senior Science.—Miss M. Cowling.

Basket Ball Manager.—Miss M. Craven.

Baseball Manager.—Miss M. Harris.

We consider ourselves very fortunate in having Miss D. Richmond for our new physical training instructor this year.

Miss Richmond is a member of the British College of Physical Education, and of the Gymnastic Teachers' Institute, England. She came to Canada last spring.

Miss Roberts is again coaching us in all sports this year, and in view of this fact we expect to produce some good teams.

The League Basket Ball games will not be played until after Christmas, but we intend to have games between the Sections, which will be started as soon as possible.

TENNIS.

A tournament was to have been played with R. V. C. on Saturday, Oct. 17th, but owing to the weather it had to be postponed. However, it was held on Saturday, Oct. 24th, with the following girls representing Macdonald :—

In Doubles.—Miss L. Johnston, Miss I. Hazeldon ; Miss M. Thompson, Miss N. Sherwood.

In Singles.—Miss M. Cook ; Miss A. Reid ; Miss J. Hodge.

The players were very enthusiastic, and the interest of the spectators was held throughout the games.

Although there was exceedingly good play on both sides, R. V. C. proved successful by winning both doubles and one single.

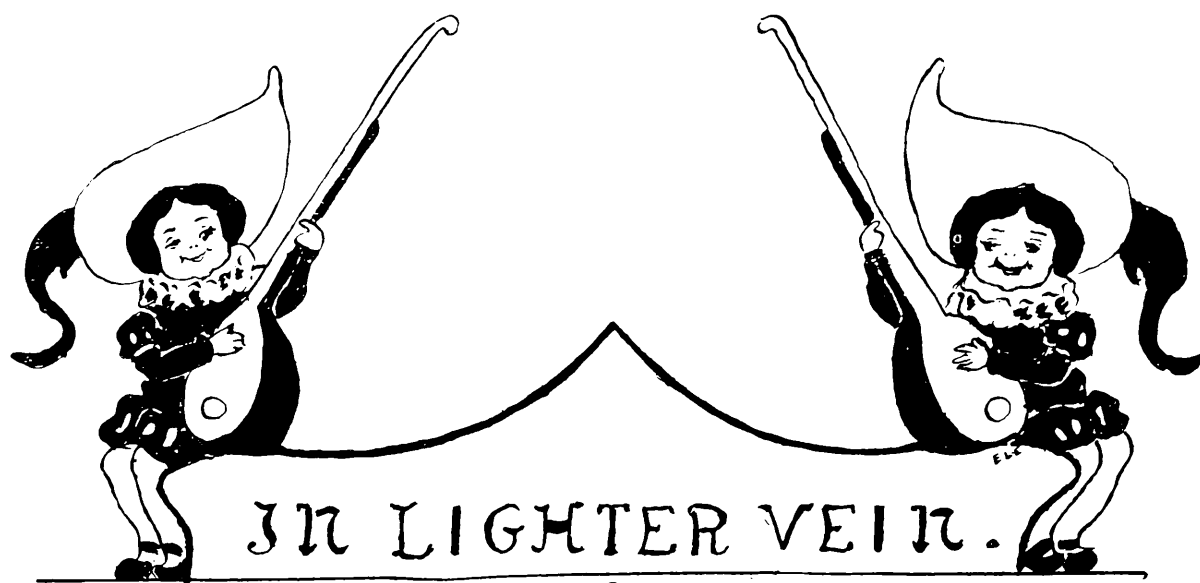
The other two singles were won by (1) Miss A Reid ; (2) Miss J. Hodge.

Miss Cook played a very fine game also, and her score was very close.

Mr. Dupres and Mr. Dashwood very kindly umpired the game. We would like also to thank the gentlemen students Messrs. Presley, Ricker, and others, who gave their assistance in marking and preparing the court.

After the match, tea was served in the Reception Room.

G. M. C.



FROM THE DINING-ROOM.

The training table will disband and mix up again. The movement originated with Evans, and who'd have "thunk" it.

○ ○ ○

Some people define the dining-room as a place wholly for the assimilation of food. A little conversation from *some* is not out of order.

○ ○ ○

If you do not wish to be put down as a grouch, keep up a continual chatter at the table, otherwise you will be labelled a "bore."

○ ○ ○

The dining-room has become a popular place for feminine posers. Tantalizing eyes, dimples, etc., lose their color in such a place.

○ ○ ○

The designer of the semi-veil had his reasons. Ask Miss "J—son."

○ ○ ○

Mr. MacClellan : "What would you call a good market garden soil?"

Grove White : "Gravel, sir."

○ ○ ○

Mr. Ness (to freshman) : "Mr. Mac-Millan has prepared a feeding pen for you in the piggery." Exit freshman.

GOSSIP FROM ACROSS THE CAMPUS.

Hyndman has been true to one girl for two years.

○ ○ ○

Ricker acts very unbecomingly for an engaged man.

○ ○ ○

Westbrook is the man with the blue eyes, wavy hair, and fascinating limp.

○ ○ ○

Prof. : "What peculiar religion did Kingsley adhere to?"

Voice (from the back of the room) : "Holy Rollers."

○ ○ ○

Found in a little boy's diary, who had been evidently reading the war news : "After executing a turning movement, mother poured hot fire on my unprotected flank."

○ ○ ○

Maiden (sentimentally) : "May I take your tie-pin?"

Hard-hearted youth : "No, but you may take the mud off my collar."

○ ○ ○

Math. Prof. : "How do you make V. equal X.?"

Sporty Stud. : "If I only knew I wouldn't be broke so often."

EVERYTHING AS IT SHOULD BE.

It was study hour. They were sitting quietly in their room—as they should. Suddenly from the room across the hall there arose a piercing shriek and the girls ran to the rescue—as they should. And what was the cause of the commotion? Only a tiny grey mouse seek-

lessons—as they should. All was quiet once again when another piercing shriek broke the stillness. This time they fell over themselves in their haste to go to the rescue. But what a surprise they received. The girl had been cleaning out her cupboard—as she should—and to her overwrought imagination her



"Here comes darling Bill—I can tell his footsteps anywhere."

ing food—as it should. Then they searched for that poor harmless creature—as they should. One girl stood up on the table while the other poked under the bed with an umbrella. After a great deal of furniture-moving that poor little animal disappeared down the air shaft, and the girls returned to their

rubber had appeared to be a mouse. Next evening she set a trap—as she should.

o o o

Science: "Do you believe in dreams?"

Aggie (frankly): "I did until I met you."

LATEST VERSION.

In the world's broad field of battle,
 In the bivouac of life,
 Show me any big tom-cat'll
 Leave the fence to side-step strife.

o o o

It is noted in a book on birds that the head of a woodpecker is equipped with a shock absorber so that the brain is not affected by constant pounding. For various reasons, too numerous to mention, however, perpetual human knockers do not need a similar equipment.

Sophomore, desiring criticism from one of the fair sex : "How do you like my new tie?"

Fair one : "Sorry, but I've not got past your face yet."

o o o

First girl : "What kind of a fellow is he?"

Second girl : "Oh ! he's the kind of a fellow who goes out for a walk with you, and then tells you how democratic he is ; not afraid of being seen with anybody."



In Trouble, or the Joke Editor on the Job.

Model (passing Tommies in the company of a Sophomore) : "Don't that hot chocolate smell great?"

Soph. (broke) : "You bet, let's stand here for a while and smell it."

o o o

There is a young maiden from Guelph
 Who boosts her home town by herself,
 She is counting the days

In all manner of ways,
 Until she returns to that shelf.

HEATED DISCUSSION.

Elsie : "I ought to be able to pronounce Armada properly, my great-grandfather fought in it."

Blacky : "That's nothing, my great-grandfather was Drake."

Elsie : "Pooh !—My great-grandmother was Queen Elizabeth."

Blacky : "Oh ! So Bess was married after all, eh?"

SHE WAS NOT TO BLAME.

Mrs. A. : " So your son is home from College ? "

Mrs. H. : " Yes, and he has the strangest ideas ! He says he's descended from a monkey, but I'm sure I don't see how that can be—unless, of course, it's on his father's side."

o o o

SOUND ADVICE.

Freshie : " Say, I'd like to ask you a question in etiquette."

Senior : " Blaze away."

Freshie : " Suppose I take a young lady to the theatre, and afterwards to supper, and then take her home in a carriage, should I kiss her good-night ? "

Senior : " No, you have done quite enough for her already."

JUST IMAGINE

Marion Ross without *her* " Little Willie."

Pearl with her " Freshman Cousin."

Sadler without his lysol.

The same gentleman losing a chance to throw the—— !

Boyce without his trousers creased.

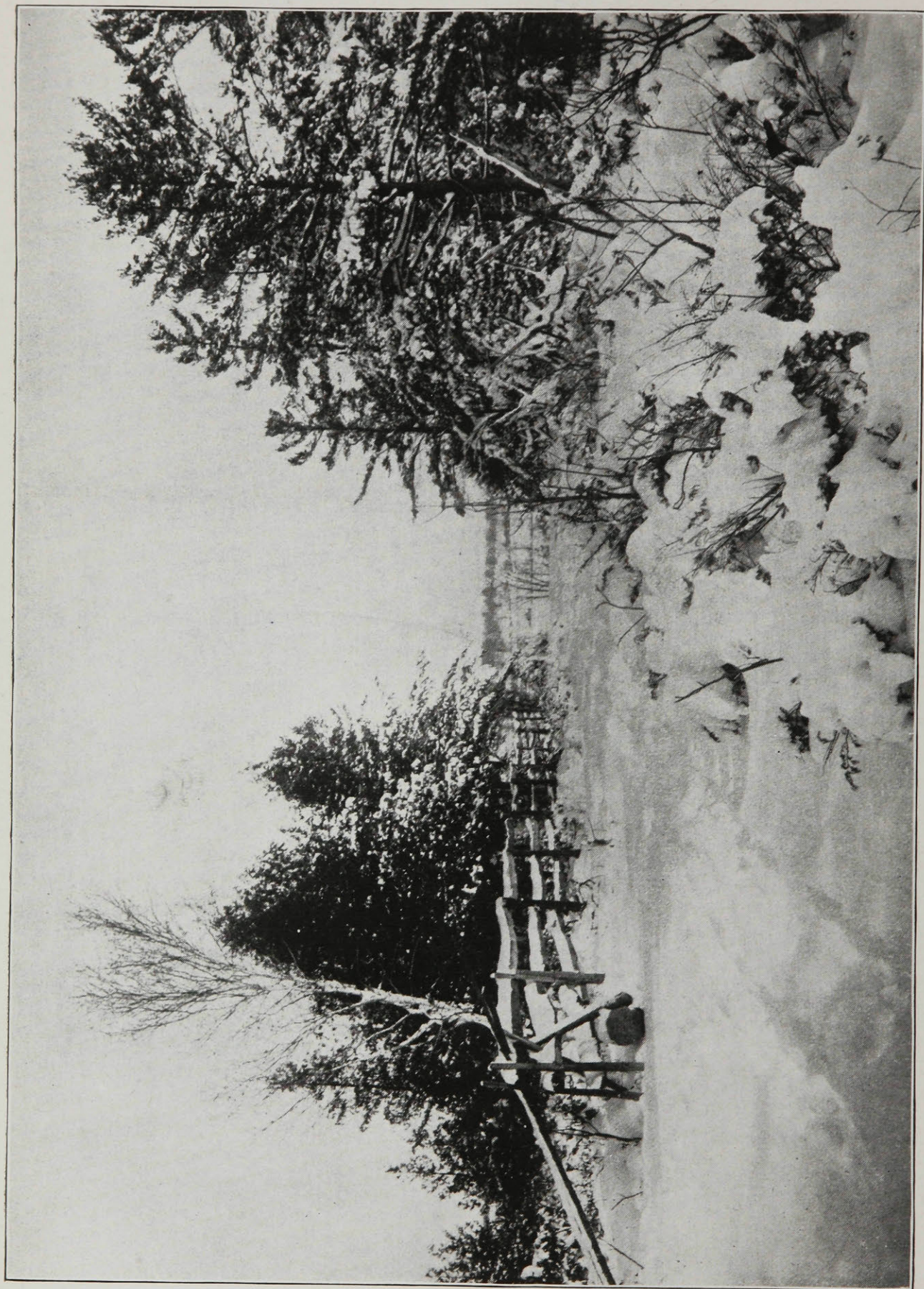
Marjorie Harris without a secret.

Evans not smoking.

The said party ever buying the smokes.

MacKechnie not talking about the women.





IN WINTER'S GARB.

Farm Losses and their Prevention.

By F. C. Nunnick, of the Conservation Commission.



LOSS on the farm may frequently be traceable to various sources. In the newer parts of this country, where pioneer conditions obtain, some waste is practically inevitable, but under old and settled conditions waste is no longer inevitable and most of the losses are preventable. The secret of success in many a big business lies in the utilization of valu-

This does not mean that the farmer should give so much time to minor things as to become a mere tinker. The pork-packer utilizing "everything except the squeal" keeps always in mind the importance of pork. The farmer in saving wherever possible must ever keep in mind the importance of the larger things in farming.

To even mention all the preventable losses on the farm would far exceed my



Manure piled so that run-off from barn carries away many dollars worth of Fertility.

able by-products and the stopping of every little leak. Loss is too often caused by the lack of a profitable and convenient market. One day this market question will receive more attention and the towns and cities will join up with the farmer, for loss on the farm means loss in the city. In the meantime the wide awake farmer will study his own individual problems in an endeavor to stop every leak possible.

space, so we will consider only a few of those commonly met with on many farms in the older parts of Canada.

NO SYSTEMATIC ROTATION.

The first loss which we shall mention is that caused by the farmers not practising a systematic rotation of crops. Recent investigations by the Commission of Conservation have shown that less than 20 per cent. of the farmers visited

by the Commission's representatives in Quebec and the Maritime Provinces are following an intelligent and systematic rotation. The area in hoe crop is too small, and the hay and pasture fields are left down in sod for from six to ten years, or until the ground is green and mossy, with the result that very small yields are obtained. These fields must be broken oftener if they are to produce profitably. Just about 50 per cent. of the grain sown is seeded to clover while it ought all to be seeded each year for either hay or to build up

Quebec conditions are nearly as bad. The manure is piled under the eaves; the liquid manure is allowed to run away and be lost, in some cases the farmer being guilty even of boring holes in the stable floor to let it away; the piles are made too high, with the result that heating takes place and valuable nitrogen is lost; and in other ways many dollars' worth of plant food are lost annually.

The liquid manure should all be saved. Straw, chaff, coarse manure or some other absorbent should be used to pre-



Two Men and one Ox doing two or three acres a day. An Over-Manned Outfit.

the soil, and more pounds of seed to the acre sown to insure a good stand. Results on the Commission's Illustration Farms have conclusively proven this point. Shorter rotations, including more hoe crops and legumes, will increase production, clean the farm and make it more fertile.

MANURE.

Neglecting to care for the farm manure is another cause of much loss. In Ontario 186 farmers out of 200 visited exercise no care to prevent waste and in

vent its loss. The horse manure and cow manure should be mixed and piled flat if it must be stored. Perhaps the best plan of all is to draw it out to the field as made and spread or put in small piles eight or ten yards apart each way convenient for spreading. This can be done provided the land is not so hilly as to cause the manure to be carried away by rain or melting snow. By applying in this way we are certain of preventing loss from heating. In applying the manure there will be less loss if it is

applied more thinly but over a larger area than is generally the case. The plants on ten acres are able to get more back from 100 tons spread over the whole field than the plants on half the field if the 100 tons were put on only the one half.

WEEDS.

Numerous experiments have been tried to ascertain the effect of weeds on crops. Where weeds are allowed to grow the crop is choked or stunted; and where the weeds are cut, and even no cultivating

of clean grain; using only first quality of clover and grass seed; practising a systematic short rotation; and preventing weeds going to seed in waste places will do much to overcome the loss from this source.

POOR SEED.

Only 19 farmers out of 1000 visited in Canada last year were found to be following a systematic selection of seed grain. In one group of 50 farmers, 19 varieties of oats were being grown.



One Man and two Horses doing good work, and much more of it than two Man Outfit with poor Implements.

done, the crop yield is decidedly larger than where weeds are allowed to mingle. They not only use moisture and fertility which the crop should receive, but, according to investigations conducted at Cornell University, they have a deleterious effect upon crops in that they poison the plants by the intermingling of their roots. It is a case of incompatibility of association. It also costs more to cut and bind and thresh a weedy crop of grain. Good preparation of the soil; selecting and sowing

Now, some of these men were growing varieties that were far from the one most suitable for that locality. They seemed to have the millinery habit, each wanted something different, and they would get it without knowing its suitability to local conditions. Many farmers are sowing five bushels of oats per acre where they would do better to clean out a bushel or two of the poor seed for feed and give the best seeds a chance. In many tests on the Illustration Farms of the Commission it

has been clearly demonstrated that it pays to sow good seed. In the case of clover, the crops grown from home grown seed have proved in nearly every instance to be superior to those from purchased seed. Too many farmers in Eastern Canada buy their seed grain, clover and grass seed. This is not necessary. Providing a suitable variety is being grown, the best part of the best field, which is fully and evenly matured, should be kept for seed and then cleaned until all the weed seeds and light or shrunk grain have been removed. In

tion. The writer has seen in Quebec and elsewhere field after field poorly ploughed, scratched over once or twice with the harrow and then sown to grain and seeded down. The result of such insufficient cultivation is that ridges are left where every furrow is turned which are plainly visible and over which the farmer jolts when cutting his crops until the field is ploughed again, which, unfortunately, in many instances, is not until ten years later. The small seeds cannot do their best under such conditions. They will not all be covered



This well is not conveniently situated. The woman has to walk a distance greater than from Montreal to Ottawa in carrying the water each year.

many districts, where the farmers think clover and grass seed cannot be grown, it has been proven that these seeds can be successfully grown. They are often found growing to perfection in fence corners and along roadsides, which goes to show that with care they will grow in the fields.

POOR CULTIVATION.

Poor ploughing and careless cultivation, or lack of it afterwards, are so lamentably common that we scarcely know how to begin to discuss this ques-

and consequently there is poor germination. Then, the young plant cannot send its root hairs, by which it feeds, through solid particles themselves, they must go between the soil grains. The more the soil is pulverized, the more openings between grains, and, consequently, the greater room for root growth. Poorly tilled soil gives plants limited feeding ground, retards beneficial chemical changes and causes soil to dry out in dry weather, all of which mean loss in crop yield. More and better tillage mixes the humus and eliminates the

undesirable air spaces under the furrow, increases the feeding ground of the plants, hastens beneficial chemical action and conserves moisture, which mean increased crop yields.

There are many other serious but preventable losses which we cannot here take time to discuss. Some of these are caused by insect pests and plant diseases, neglect of farm machinery, lack of conveniences around the farm buildings, use of narrow and unsuitable implements, and the general lack of management in conducting the farm enterprise. Farm management means applying business methods to farming. The farm enterprise *must* be organized for the purpose of securing the greatest

continuous profits. It is not enough to raise good crops or to secure a large animal production; these must be produced economically. This is accomplished only when capital and labour are so adjusted to existing conditions that maximum yields are obtained at the lowest cost. Every department must be well organized and must be co-ordinated with the others. Labour must be fully employed, capital must be properly utilized, both quantity and quality of products must be secured, and the products must be wisely marketed.

The more the farmer thinks and the more his brawn is intelligently directed by his brain, the greater will be the resultant satisfaction and success.



A Perilous Position.

A Trip to the Pacific Coast.



THE trip to and from the Pacific Coast is full of variety and gives one an idea of the immense country in which we live. The advantages of the railroad over the old waggon can be seen in taking a trip like this when we consider that in the old days it took about a month, whereas at present the fastest train out of Chicago makes the journey in sixty-eight hours.

The route to Denver lay through a country very much like that which one sees in going to Ottawa, with the exception that there are not so many trees. After leaving Denver we travelled over the Rocky Mountains, through the Royal Gorge. The country through this stretch of the journey, until we got to the other side of this range, which is the main range of the Rockies, is rugged, with steep precipices rising directly from the railroad on one side and the Colorado River rushing by on the other. On the level plain into which the valley opens is one luxuriant growth of peach, pear and apple orchards, which were very far advanced in growth as compared with the trees in the Ste. Anne's district. On passing into Utah, the country was not so attractive, until we came near Salt Lake City. The country about the city, which was once a vast desert, is now a flowering garden, owing to the efforts of the Mormons. In the city is situated the Mormon temple, in the building of which, it is said, no iron was used, leather thongs being used to join the beams together.

Between Salt Lake and California are the Sierra Nevada Mountains, which are bleak and uninteresting. The first glimpse of California was obtained while going down the Feather River Canyon, where the vegetation is much more luxuriant than on the Eastern side of the mountains. This canyon opens out into the Sacramento Valley, which is one of the most fertile valleys of the State. The capital of California, Sacramento, which is situated on the river of the same name, has a semi-tropical appearance, oleanders, magnolias, olives, palms and orange trees being planted along the residential streets and around the Capital buildings. From Sacramento to Bernicia the railroad goes over the rich delta lands of the Sacramento River, this land being used principally for growing vegetable crops near the river, while fruit of all kinds is grown further away on the foothills. At Bernicia, the train is put on a ferry boat, which is the largest in the world, to cross the Sacramento River. From here to San Francisco the train skirts along the side of the famous land-locked harbor of San Francisco to Oakland, at which place we left the train and proceeded by ferry to San Francisco.

The modern city of San Francisco has been rebuilt since the fire in 1906, so that many fine stone buildings have given place to the old wooden ones. One of the chief points of interest in the city is Chinatown, where one can see oriental life as it exists in China. The Golden Gate Park, which lies between the city and the Pacific Ocean, although

not a natural park, has been laid out with exquisite taste and is the beauty spot of San Francisco.

There are many little valleys running inland from San Francisco Bay in all directions. One of the prettiest of these is Napa Valley, which used to be a famous wine-growing section, but, unfortunately, the grape vines were mostly killed, about fifteen years ago, by phylloxera, and the land has never been replanted to fruit except in those sections which are suitable to prune growing, for which the valley has now become famous.

From Napa we went to Los Angeles, through the San Joaquin Valley. This valley is famous for its table grapes and raisins, this being the only part of the United States where they are grown commercially; besides oil, which supplies the fuel for all the factories in the State. Los Angeles is remarkable for the number of beautiful homes in its vicinity, their beautiful surroundings being due to the very fine climate, to which winter is almost unknown.

Our return to San Francisco was by way of the Coast-line which is known as the "Road of the Thousand Wonders," with its old Spanish Missions, beautiful beaches, and groves of the famous red wood trees. Leaving San Francisco and retracing our steps over the Sacramento line we branched off in a northerly direction, travelling over the Shasta route to Seattle. The wonderful climate of this valley can be judged from the fact that the same crops can be grown as at San Diego, six hundred and fifty miles to the south. Near the Northern boundary of the State is Mount Shasta, with its sulphur springs. Here the train stops to allow tourists to drink from its waters and to see the magnificent waterfalls which produce a beautiful effect because of their being lit

with differently colored electric globes. We next passed through the States of Oregon and Washington, where the trees are much more luxuriant than in California, on account of the greater rainfall, to Seattle, which is the most important town in Washington and one of the most progressive towns on the Pacific Coast. From this thriving city the boat sails up Puget Sound, between fir-clad islands, all of which help to make the journey to Vancouver so enjoyable. An idea of the size of the firs in this district may be gained from the fact that the flag pole in front of the court house at Vancouver is about 200 ft. high, and was obtained from one of these trees.

Just before entering the inner harbor, one sees on the extreme right Point Gray, where the new University of British Columbia is to be built, and nearer, on the right, is Stanley Park, which is, I think, without exception, the finest city park in the world.

The last part of the journey was over the world-famous C. P. R. Kicking Horse Pass route, along which snowy peaks, glaciers, rugged precipices, foaming torrents, canyons and lakes, set like gems in pine-clad mountains, pass in quick succession during the trip to the eastern side of the mountains. Near the summit is one of the greatest engineering feats of the century. To reduce the grade, two immense spiral tunnels have been driven through solid rock. At the summit, or "The Great Divide," there is a stream which splits into two parts, one flowing to the Pacific and the other to the Atlantic. Just past this point is Laggan, which I cannot describe better than by quoting an extract from the Chicago Evening Post:—"If one stops nowhere else in the Canadian Rockies, one must stop here, for there, hidden off behind the

mountains, is Lake Louise. Such glory of light and color, such sparkling mirror water, such magnificence of evergreen mountains, rocky steeps, snow, ice and clouds may exist in other variations but nowhere in the world can they be surpassed. Lake Louise is the gem for which the Canadian Rockies are the setting."

The run down the eastern slope is altogether different to that of the west-

ern, there not being so many trees, as a result of which the country is a pleasant change after the mountain journey, but when one gets four days of this flat treeless country it is good to get back once more to Montreal.

The trip across the Canadian Rockies is an experience which will not soon be forgotten and a trip that cannot be equalled by any of the American railroads. T. RANKIN, '17.

The Parting Year

The parting comes on the morrow, my friend.
And the day is none too fair;
But a wayward thought and a fugitive hope
Shall join in my evening prayer.

The parting comes on the morrow, friend.
For the days have run their length;
But a memory stirs the pulse of time
And we shall judge its strength.

The light of memory little recks
Not finite in its view,
The lengthened path—the darkened way—
'Twas old when the world was new.

We part, old friend. Another year
Breaks o'er our shattered line,
Thy feeble breath is waning now,
Adieu, old friend of mine.

Agriculture in Argenteuil County.



IN the last issue of the MAGAZINE we were favoured with an article on progressive agriculture in Sherbrooke County. This suggested the idea that it would only be fair to pay a little attention to some of the other counties in the province.

Last summer I had the opportunity of seeing a large part of the province,

certain extent they have a right to this opinion. However, we have several districts in the province that are forging ahead very rapidly, and through time there is no doubt but what Quebec will stand in such a position that we may compare her with any other province without having to blush at the result. The MAGAZINE Board has intimated its intention of running several articles in



J. A. Arnold's Horses—First, Second and Third at Montreal Horse Show.

and I was able to make comparisons of the different counties; also to draw some conclusions as regards agricultural conditions. Many people, especially those from Ontario, have an opinion that Quebec is a back number when it comes to good farming, and perhaps to a

different issues on some of the counties in the province, in order to familiarize their readers with what is being done along agricultural lines in the various parts of the province.

In this issue I will attempt to give some idea of what is being done in

Argenteuil County. I have chosen this county to write about, firstly, because I am better acquainted with it and, secondly, because it has no District Demonstrator, like several of the other counties, to inform us as to what is going on.

Argenteuil is an old county situated on the north shore of the Ottawa, with its centre about forty-five miles from Montreal. Through the northern portion of the county run the famous old Laurentian Mountains, and scattered all through this region may be found many beautiful lakes, among the most important of these being St. Agathe, which has become famous as a resort for invalids; Sixteen Island Lake, Lake Louisa, Lake Sir John, and many others. For the past few years these lakes have been quite popular as summer resorts, and their shores are dotted with cottages which are occupied by city people during the hot summer months. This part of the county is very rough, and has been purely a lumbering district. Many are the stories told of the roughness of the inhabitants, the family feuds and war-like tribes which used to exist in this northern country. Times have changed, however, and these stories are now only history.

Lachute is the central town of the county. The farming land extends from here south to the Ottawa River and west to the county line. Most of this area is exceedingly good farming land, and being within reasonable range of Montreal, is essentially a dairying district. One can readily appreciate this if he is at the stations in the morning when the milk train goes through. A special milk car is left at Lachute every night, and this car leaves for Montreal the next morning with about 2,500 gallons of milk. Further down the line is Wilson's

Station, a small stopping place provided by the C.P.R. for the sole reason of tapping another large dairy section; here, too, large numbers of cans are loaded every morning. At St. Hermas, a station just about the line between Argenteuil and Two Mountains counties, another special car for milk is provided, and the greater portion of this car is filled with milk from Argenteuil.

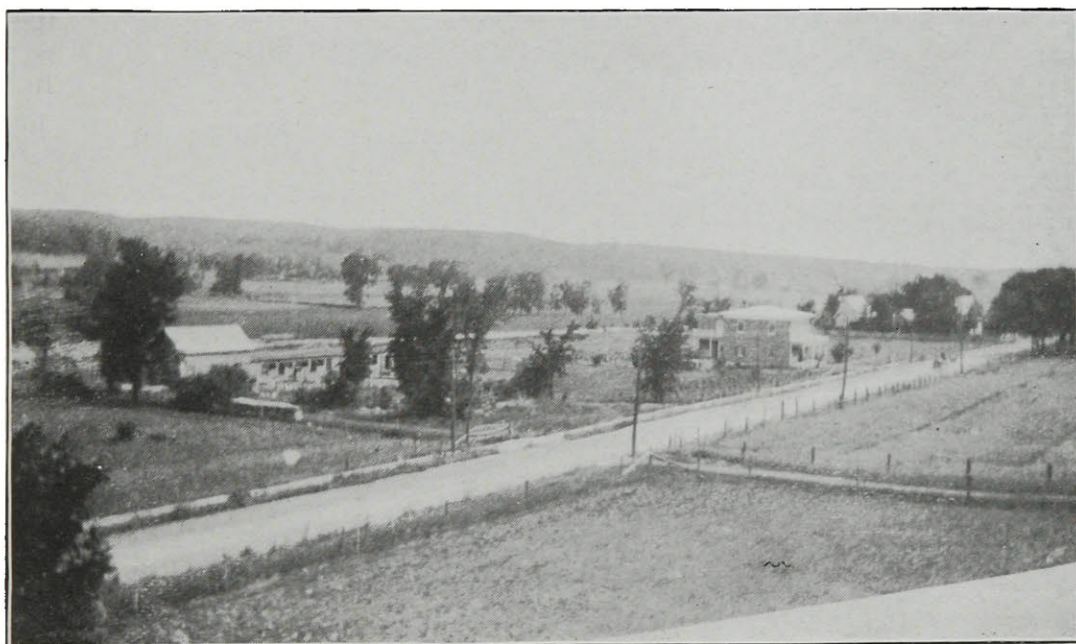
Seven or eight years ago, the number of silos in the county was extremely small—in fact, you could count them on the fingers of one hand, but to-day the first thing a stranger will notice when driving through the country is the number of silos. They are scattered all over the country, and in the best farming districts nearly every farmer has one, while some of them have two. This itself speaks for a certain amount of advancement. The farmers have realized the importance of corn silage in the economical production of milk for city trade, and if there is one thing they pay special attention to it is the corn crop. The land seems to be admirably suited to the growing of corn, and in some sections great rivalry has existed as to who will win the prize in the corn crop competition. So far, most of the corn has been planted with the grain drill. Since, however, the winners in the competitions have grown theirs in the check-row system, which is, without a doubt, the best, through time the majority of the farmers will appreciate this and abandon the grain drill for the corn planter.

Roots are not grown to any extent; not that the land is not suited to it, but there is an impression abroad that roots entail an extra amount of labor. Clover also has not been grown very extensively; however, with the advent of corn we find also more clover being grown.

Several farms are doing very well in this respect, and have produced clover seed for several years.

The new Canadian Northern Railway, which is being built across the continent, runs through the southern portion of the county. The rails are now laid, and within a year, unless the Germans take Canada, Montreal will be receiving as much milk again from Argenteuil as she is now. The district through which this road runs is one of the best in the province, having rich level land and artesian or running springs, the joy

industry. The farmers of the county are fortunate in having several men in their midst who are doing some importing, and this, no doubt, will be a great incentive to the live stock industry. Messrs. George and John Hay import some Clydesdales nearly every year, and during the last few years the farmers have kept some of this imported stock within the county, several men having made a very creditable start in the breeding of Clydes. Another name worthy of mention is that of J. A. Arnold, of Grenville. For several years



A View of one of Argenteuil's Valleys.

of any stockman's heart and a boon to any dairy district, abounding on all the farms.

The farmers are awake to the possibilities of their occupation, and are anxious to find out anything which may be of benefit to them.

In the farm competitions, several have won medals--Mr. W. Rodger, of Lachute Road, having won the silver medal twice for his farm. He has also taken first in the ensilage corn competition. A certain amount of attention is also being paid to the pure bred end of the live stock

he has been importing and breeding Percherons, also a few Clydes and Shires. His record at some of our largest fairs has been very good. The cut accompanying this article shows a class of two-year-olds, first, second, and third at the Montreal Horse Show last spring. J. H. Black, another enthusiastic live stock man, devotes his attention to the breeding of Ayrshires. He has brought considerable imported stock to the county, and for many years has been breeding and improving his herd, which, although not large, is very

good, enabling him to make a creditable showing several times at Ottawa. He is not alone in the business, however, and has keen rivals in Robert Doig, Alex. Woods, and several other farmers of the district.

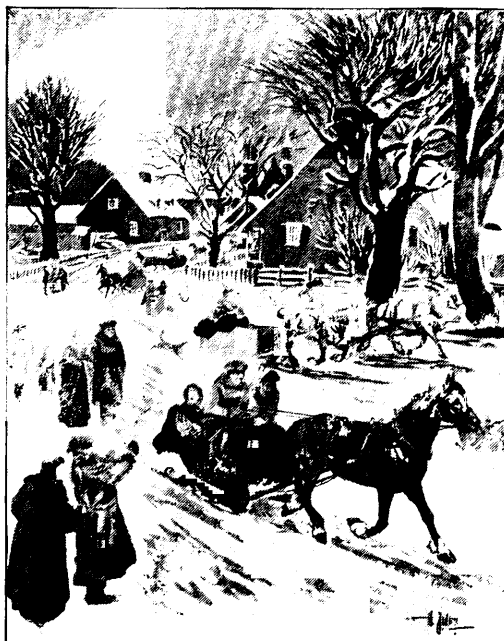
As regards Farmers' Clubs and similar organizations, they are somewhat backward. There is only one Farmers' Club, and it has done considerable, but there is room for many more similar organizations to bring the farmers closer together.

The Agricultural Society, however, is quite a strong one, and every fall a very good fair is held, one which can bear comparison with most of the other county fairs throughout the province. This fall, in spite of the fact that it rained during the last two days of the fair, the exhibits in every line surpassed those of previous years, and although there was a decrease in gate receipts, the Society is still to the good financially, and with the hearty co-operation of the farmers should be one of the strongest societies in the province in a few years. One of the features of

this society is the Ploughing Match held annually under its direction. In many societies the ploughing match has been abandoned, but this, in my opinion, is a pitiful state of affairs, as I doubt if there is any one thing which arouses more enthusiasm or does more good in the line of making a man careful and painstaking in his work than does the ploughing match.

In some respects the county is very backward, and there is a great need for someone to help them organize and to act as a leader along various lines. I believe they are to receive the services of a District Demonstrator next year. This is an excellent thing, and the Representative with proper tact and lots of hard work will have a splendid chance to show results, while the people of the county will reap the benefits. On the whole, prospects are bright, and through time, with improved methods, co-operation and organization, there is no reason why Argenteuil, and many of our other counties, should not become prominent as progressive agricultural centres.

L. C. McOUAT, '15.



Let the Merry Bells Ring Out.